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The aim of *Southern African Field Archaeology* is to communicate basic data to professional archaeologists and the public.

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**Cover illustration:**
Pottery from the excavations at /hei-/khomas in the Richtersveld, Northern Cape, p. 46.

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# OPINIONS

## NEW OPPORTUNITIES, ACADEMIC ETHICS AND CONFUSING TERMINOLOGY

This is the 10th volume of *Southern African Field Archaeology*, and we would like to extend our gratitude to those who have supported the journal during this period.

The obvious question which immediately comes to mind is, what has happened in South African archaeology during the past decade? Was there any growth or decline in the discipline? Paging through the opinions columns of the past years it is evident that few, if any of the everyday issues have changed.

By far the most important development during the past ten years has been the radical change in the socio-political environment after 1994. This had a major effect not only on the direction and thinking within the discipline, but also on the mind sets of archaeologists themselves. The new National Heritage Resources Act which came into operation in 1999, will no doubt have (and all ready has had) far reaching implications for archaeology.

The Act promotes public participation and involvement regarding the identification, conservation and management of heritage resources. This introduces new issues and thoughts to the archaeological world in the form of indigenous intellectual property rights and related issues - in short, "who owns the past". Unfortunately, it is not always about ethics, indigenous rights, intellectual property and sensitive heritage (*i.e.* human remains), but often about political and/or personal agendas. Several of these issues

have been discussed previously in this column (Ouzman 1999; Prins 2000).

So the question remains is, what stand archaeologists and archaeology to do now and in the future? The way I see it, one can continue to hide in a dark office, or to open the curtains and observe the field of opportunities which we are presented with. On the one hand, the new Act places new responsibilities on archaeologists - it puts the integrity of archaeology in the hands of archaeologists. We cannot afford to bring the discipline into disrepute by self interest and/or socio-political agendas.

On the other hand, and most importantly, the new dispensation opens up new opportunities in the cultural heritage field. For example, heritage tourism creates numerous opportunities and employment prospects for heritage consultants *i.e.* the training of heritage guides and management/conservation and opening of heritage sites to the public (also see Ouzman 1996). This may be the future of archaeology.

Let us return to some of the general everyday issues in archaeology, which have been around for some time and have surfaced again in this volume. The interview and the article by Butler is controversial, both in terms of the information on the San and their paintings (in comparison with current views regarding the interpretation of the art) as well as his refusal to allow anyone else to interview Sister Mariya. It is unfortunate that this action prevented specialists in the field of rock art from collecting information which could have been of great value to the discipline.

Terminology seems to be a problem across a wide field. Steel re-addresses a long standing problem in the Iron Age (also a problematic term) and discusses several possibilities. Also in Stone Age papers and in general we have been wrestling with terms such as Khoi, KhoiKhoi, Khoisan, Khoe, Khoekhoe, Khoekhoen, Khoe-Khoen, Khoesaan and recently KhoiSan and Khoe-San. In the past we refered to Bushmen paintings, but now it is San paintings. What's next?

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# A RIET RIVER BURIAL FROM KOFFIEFONTEIN, SOUTH AFRICA

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## ABSTRACT

In October 1997 a human burial was rescued from an erosional context next to the Riet River on the farm Poortjie, Koffiefontein District, Free State Province, South Africa. The stone-lined and capped grave housed an adult female buried in a vertically flexed position. An undecorated miniature pottery bowl and three cowrie shells were recovered as associated grave goods. The Poortjie burial is $^{14}C$ determined to 250 ± 45 BP and it is the sixth of 87 excavated Riet River burials to be dated. The burial is located 42,5 m from a Type R stone-walled settlement and 310 m from two rock-engravings and a gong rock. The Poortjie burial is described with reference to the identity of Riet River burials and the authorship of Type R settlements. The ethics of excavating human remains, even in such 'rescue' contexts, is also considered.

## INTRODUCTION

South Africa's western Free State and eastern Northern Cape Provinces constitute an interior plain made up of 260 million year old Ecca Group geology within the Karoo Supergroup (King 1980:537,556; Catuneanu *et al.* 1998). The ecology of this region may be characterised as semi-arid Eastern Mixed Nama Karoo rich in medicinal plants and geophytes and which receives 300-500 mm of patchy summer rain (Low & Rebelo 1996:55). The current ecology is largely a function of overgrazing and Acocks (1975:7-10) has suggested greater Bushveld coverage until AD 1400, with sweetveld grasses around the Riet River in the east. The perennial Riet River, which the !Kora, a Khoekhoen herder people, called ≠Gama-!ab or 'Muddy River' (Nienaber & Raper 1977:419-420), runs through the lower western Free State and into the Northern Cape to its confluence with the Vaal River or Hei-!Garib (Fig. 1). The Riet River is a dominant topographical feature and natural focus for human activity. Gatherer-hunters ancestral to the San[1] have left behind near-countless Middle and Later Stone Age lithics (*e.g.*, Sampson 1972; Humphreys & Thackeray 1983) and thousands of rock-engravings (*e.g.*, Johnson 1910:70-78; Morris 1988). The Riet River region played a formative role in the development of Southern African archaeology. It was here that Goodwin & Van Riet Lowe based much of their pioneering 1929 Southern African lithic sequence. Van Riet Lowe went so far as to describe the area as "...rich beyond the dreams of even an archaeologist" (1931:434). Though not a region of Iron Age settlement on account of its aridity (*e.g.*, Humphreys 1976), there are at least 92 low (maximum height 1 m) and extensive stone circles that cluster in groups of 2–13. These settlements follow 135 km of the Riet River between the Kalkfontein Dam and Plooysburg (Fig.1), with a noticeable concentration between Koffiefontein and Jacobsdal. Here they occur every 5–8 km and are always built within 3 km of the Riet River - hence their designation Type 'R' or 'Riet' by Maggs (1971). Though Type R settlements have a physical structure distinct from known Late Iron Age settlements, it is not entirely certain who built them. Type R settlements do not have an abundant material culture – a function of the harsh environment and the episodic way in which these settlements seem to have been occupied. Excavations reveal both hunted game and domestic stock remains (Maggs 1971; Humphreys 1973; Brink *et al.* 1992). Numerous grinding patches attest to the use of plant resources. Freshwater mussel shells and stone fish traps indicate utilisation of riverine resources (Stamelman 1948: 73; Willcox 1965:139-140). Metal finds are rare but Later Stone Age lithics are abundant. The plain, well-fired and thick Type R pottery constitutes a singular local style with cosmopolitan influences (Jacobson *et al.* 1994, 1998). It is better made than gatherer-hunter grass-tempered ware and has elements of Khoekhoen pastoralist pottery (*cf.* Sadr & Sampson 1999), with a hint of more northerly Black farmer pottery. Available dating evidence places the building of Type R settlements to between AD 1380–AD 1780 (Maggs 1976:44; Humphreys 1997:78). Though mostly abandoned prior to the early 18th-century travels of Burchell, Campbell and Smith, historic and ethnographic evidence shows the Riet River as home to a heterogeneous mix of San,

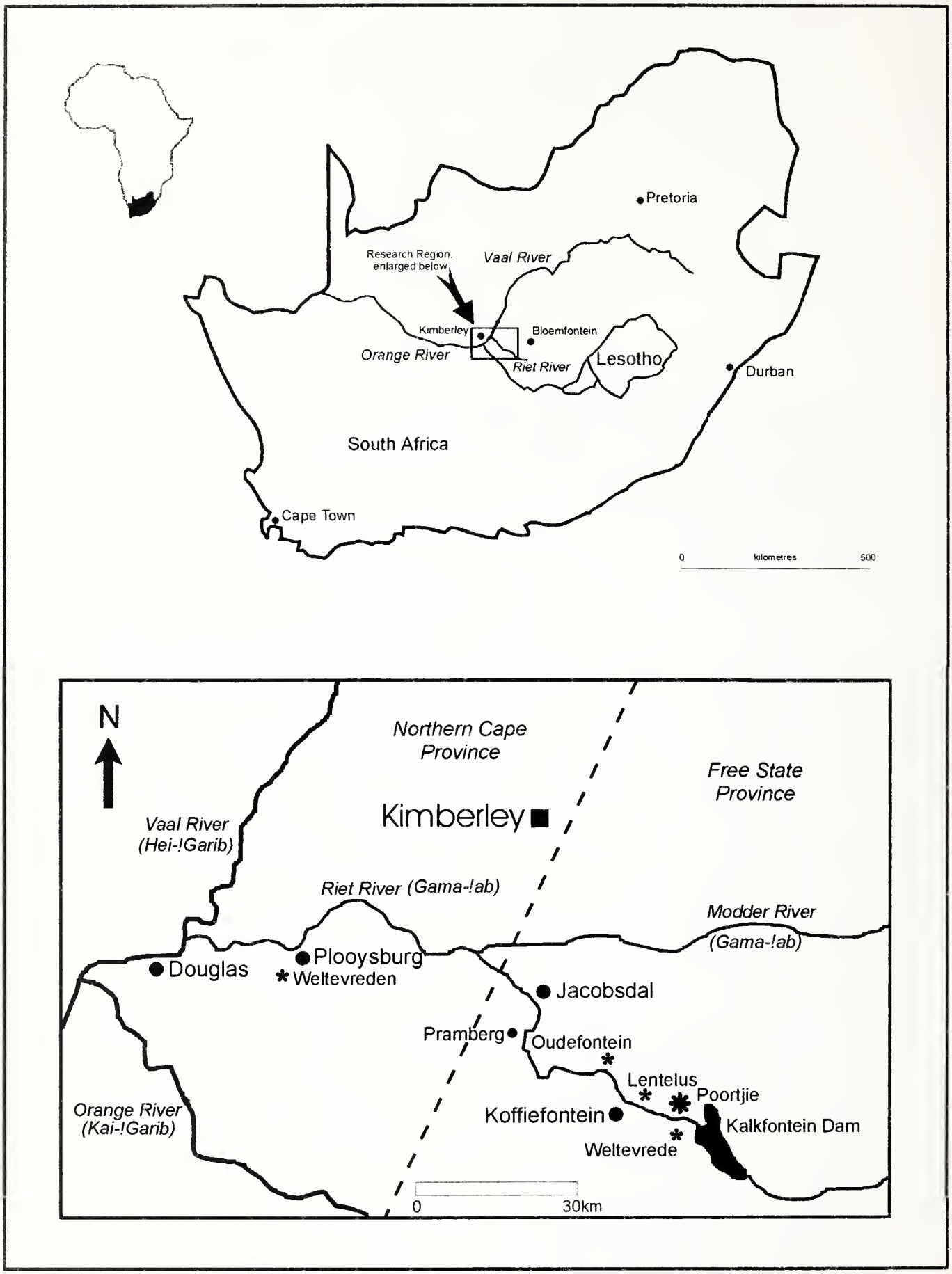


**Fig. 1: Research region with locations of dated Riet River burials.**

Khoekhoen (!Kora and Griqua), Black (Tswana and Xhosa) and White (Boers and hunter-travelers) (Humphreys 1975, 1997) groups, most of whom appear to have been relatively recent residents. The combination of excavational contextual and ethnographic evidence points strongly to stock-owning San as the builders and occupiers of Type R settlements (Maggs 1971; Humphreys 1972, 1997; see also Beaumont & Vogel 1984:95). These people combined a traditional gathering and hunting lifestyle with a pastoralist one and though a distinctive local group, they had links with many of their neighbours. Charles Sirr Orpen, for example, encountered Kwa-ha, a San man whose mother was a 'Bushwoman' and father a 'Gonah Hottentot' (1877:83). Kwa-ha was born and resident near Bethulie, 110 km south-east of Kalkfontein Dam. He said: "I can speak Bushman language well, but I cannot understand the Bushmen of Riet River; their language is 'too double'" (Orpen 1877:85): suggesting a distinct San or perhaps Khoe group. This 'Khoe-San' identification is confirmed by skeletal evidence from graves excavated along the Riet River, many of which were sited next to Type R settlements (Morris 1984, 1992:171-172).

These Riet River burials are located on the river bank or terrace and are most concentrated between Kalkfontein Dam and Jacobsdal (Maggs 1976:44; Morris 1992:25-26) (Fig. 1) - neatly overlapping the core area of Type R settlements. In addition, just as Type R settlements are far fewer between Jacobsdal and Plooysburg, so too do Riet River burials become scarcer (but see Humphreys 1982). Since William Fowler - Walter Battiss' archaeological mentor - excavated the first such burial in 1922, 86 skeletons have been recovered from 83 graves (Humphreys 1970; Humphreys & Maggs 1970; Morris 1984:33-37; 1992:17-18,25-38; Brink *et al.* 1992:56-57). Alan Morris' physical anthropological research identifies these skeletons as "likely to represent a single, relatively homogenous population" (1992:152) that could be 'San' or 'Khoe' but most probably San with uni-directional gene flow to northern Sotho-Tswana farmers and which have little in common with known Khoekhoen groups living further down the lower Orange River or Kai-!Garib (Morris 1984:320, 1992:154). Most of the 86 Riet River skeletons were recovered from primary burials and 35 had associated grave goods – a context that favours the expression of group and individual identities (*e.g.*, Chapman *et al.* 1981; Carr 1995). I now describe one further such Riet River burial from the farm Poortjie in the Free State's Koffiefontein District.

## DESCRIPTION OF THE POORTJIE BURIAL

In October 1997 Mark Liddell of Koffiefontein reported a burial eroding out of the Riet River's terrace on the farm Poortjie 990, which is 11 km south-east of Koffiefontein (Fig. 1). The burial was located at 29.27.23 S; 25.07.09 E in an erosion ditch or 'donga' that drains into the Riet River 450 m to the south-west (Fig. 2). The upper part of an oval grave pit had been exposed by erosion and human remains were protruding out of it. The buried person's severely weathered cranium was visible and bone fragments lay exposed on open ground next to the grave. A diminutive but well-made and undecorated grit-tempered pottery bowl was also exposed. (Fig. 3). The burial's stone sides and capping had provided some protection, but the surrounding ground level had eroded by up to a metre's depth and total destruction was imminent. The burial's parlous state was probably initiated by the 1988 floods that destroyed three Riet River burials at Pramberg near Jacobsdal (Brink *et al.* 1992) (Fig. 1). Immediate action was required to prevent further destruction and the burial was excavated on 12th-13th October 1997. Adapting the tech-nique developed by Humphreys & Maggs (1970:116), a 2 m x 2 m grid was set up over the grave with N1, N2, S1 & S2 quadrants (Fig. 4). The grave pit had maximum surviving horizontal dimensions of 850 mm x 780 mm and vertical dimensions of 450 mm below the present surface level and 220 mm above it. Allowing for that portion of the grave already lost to erosion, this falls within the 0.6 m – 1.4 m depth range recorded for Riet River burials (Morris 1992:28). N1 & N2 were excavated first and a section drawn, after which S1 & S2 were excavated (Figs. 4 & 5). The burial was capped by at least eight small rocks and six larger rocks formed the grave's sides. Seven additional rocks of a similar size range lay within 1 m of the grave's perimeter and may have been part of the grave's walls or may have formed additional layers of soil-separated capping such as was recorded for at least nine other Riet River burials (van Riet Lowe 1931:432; Humphreys & Maggs 1970:118-119; Morris 1992:28). The Poortjie grave's infill consisted of hard, gritty brown soil that did not powder easily despite containing many small rootlets. There had been termite activity in S2. The original contours of the oval and bowl-shaped grave pit were easily discernible (Fig. 6) as the infill, though hard, was much softer than the very hard red ground of the river terrace and the even harder, shallower ground beyond. The Poortjie person was buried in a seated, vertically flexed position. The bones are almost complete but brittle. The body had suffered considerable downward and northward torsion. The spine thus ended up on an north-south axis and the head faced north-north-west. The legs were drawn up and the arms held between chest and legs, with forearms resting just below the knees. Most of the toes and some fingers survived. The arm and leg bones are all present, though their epiphyses are in a poor condition. The vertebrae and one scapula (the other was missing) are preserved, as are most of the ribs. The upper half of the cranium had weathered away completely. The mandible and 27 teeth are in good condition. The pelvis was fragmented but sufficiently intact to identify the person as an adult female.

## GRAVE GOODS

Grave goods have been recovered from 35 (17 female) of the 83 Riet River graves (Humphreys 1970; Morris 1984; Appendix 1, 1992:28-33; Brink *et al.* 1992:56-57). These

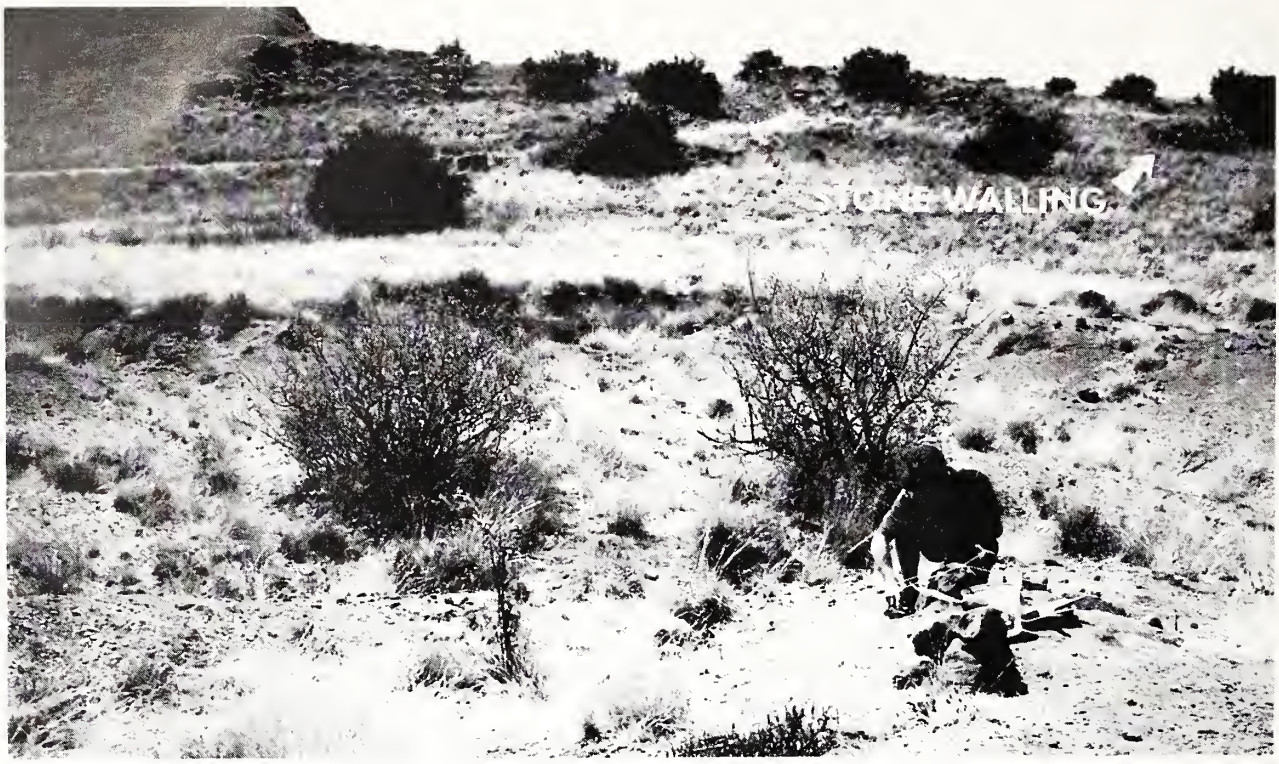


**Fig 2: View to the east of erosion threatening Poortjie burial. Note the Type R stone walls.**

**Fig. 3: View to the south-east of the Poortjie burial before excavation.**

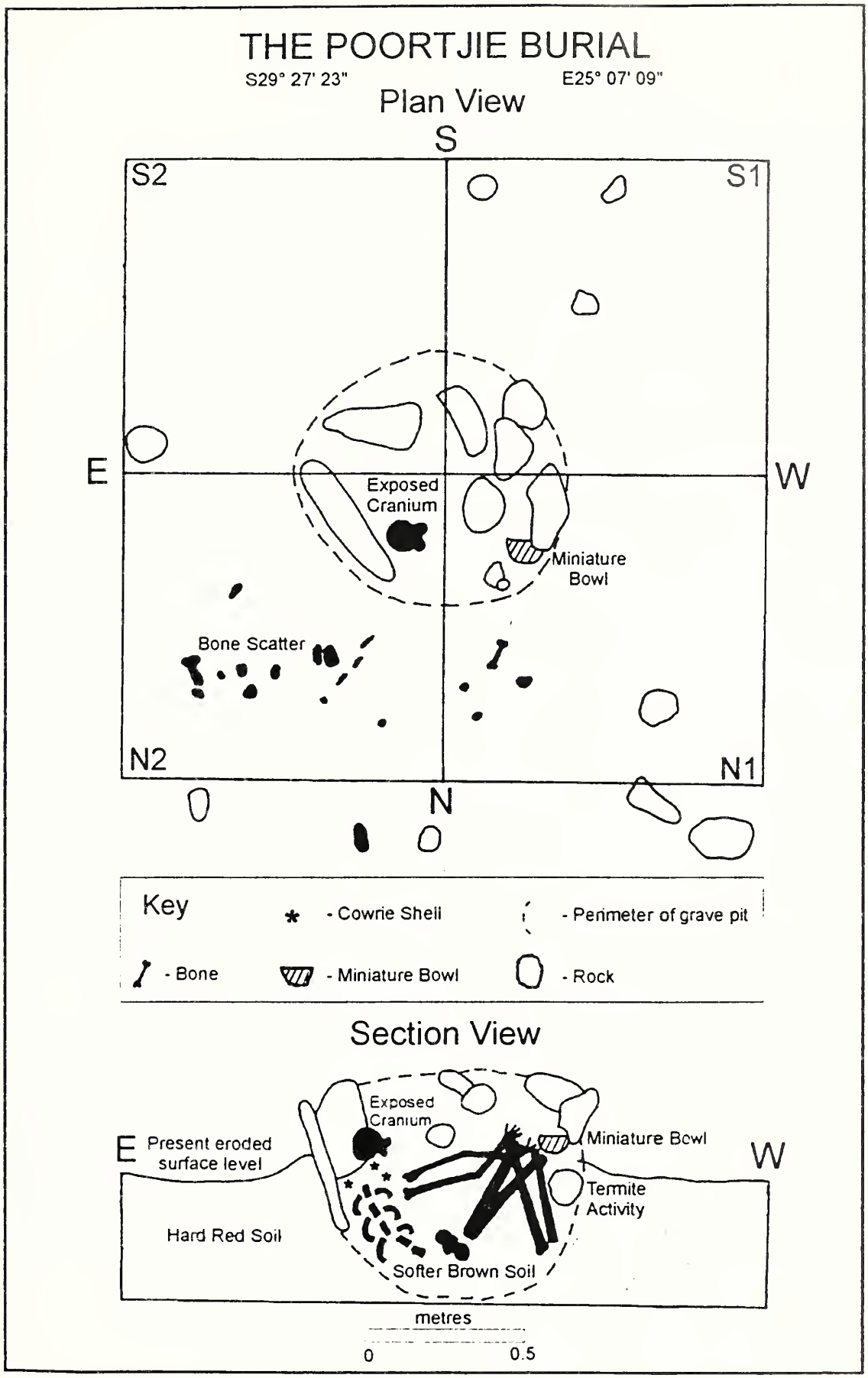


**Fig. 4: Plan and section drawings of the Poortjie burial.**

grave goods include: animal bone ornaments - such as a sheep/goat metacarpal pendant and cattle teeth from a female's grave - in 8 graves (2 female, 4 male, 2 juvenile); bored stones in 3 graves (2 female, 1 male); copper bangles, beads and earrings in 7 graves (3 female, 4 male); cowrie shells in 8 graves (4 female, 2 male, 1 juvenile, 1 unknown); glass beads in 3 graves (1 female, 1 male, 1 juvenile); grindstones in 4 graves (1 female, 3 male); ostrich eggshell beads in 20 graves (9 female, 8 male, 3 juvenile); pottery in 3 graves (2 female, 1 unknown); tortoise shell fragments in a juvenile's grave; a sharpened slate slab in a male's grave and a red ochre and specularite sprinkling in another male's grave. The Poortjie burial confirms this pattern with four items recovered as grave goods: three mature cowrie shells (*Cypraea* spp.; probably *ursellus*, which occurs between KwaZulu-Natal and Moçambique) and a single undecorated, grit-tempered and well-fired pottery bowl (Fig. 7). The grave infill was sifted through 6 mm and 3 mm mesh, but no further grave goods were found. The cowrie shells were located near the person's neck (Fig. 4) and were probably part of a necklace or even the headdress favoured by at least some historic Riet River inhabitants. William Burchell, for example, noted the following on 12th November 1811 near the Riet and Vaal Rivers' confluence: "We were visited by a party of fourteen Bushmen...Several of them wore two or three cowries interwoven with their hair." (*vide* Humphreys 1975:25). The pottery bowl was placed near the person's knees and hands and it is very small – even miniature – with dimensions of 120 mm diameter and 55 mm high. The walls are 3 mm thick at the rim and thicken to 14 mm at the base. This bowl is markedly finer than the up to 40 mm thick pottery fragments found at the adjacent Type R stone-walled settlement and it may represent a purpose-made grave goods item. The bowl's one side is distorted; perhaps from the weight of the grave's capping. Interestingly, three other miniature pottery bowls have been recovered as Riet River burial grave goods. A virtually identical 110 mm diameter and 60 mm high bowl was found in an unsexed flood-damaged Type R burial at Pramberg, 46 km to the north-west (Brink *et al.* 1992:57). The other two miniature bowls were recovered from 'crouched' female graves on Lentelus, 6,5 km west-north-west of Poortjie (Humphreys 1970:105,108; Morris 1992:30). The Lentelus bowls are 76 mm and 83 mm high (Maggs 1971:52; see also Goodwin & van Riet Lowe 1929: plate 36) and both were accompanied by cowrie shells, hinting at an emic association of: females – seated position - miniature pottery bowls – sea shells. In addition, one Lentelus burial is $^{14}C$ dated to AD 1560 (Morris 1984:332, 1992:33). Given these graves' striking similarity with their seated positions, geographical proximity and near-identical grave goods, I decided to test for a temporal correspondence.

## AGE DETERMINATION OF THE POORTJIE BURIAL

A $^{14}C$ age determined to 250 ± 45 BP (Pta-7923), calibrated to AD 1655 (1669) 1681; 1749-1806, was returned from a 200 g sample of the Poortjie person's left femur. The Poortjie and Lentelus burials may thus be no more than 100 years apart. The Poortjie date is also consistent with four other Riet River burials excavated between Koffiefontein and Jacobsdal (Fig. 1) and dated to between AD 1060 – AD 1840 (Table 1). These numbers are also in agreement with two excavated Type R settlements – Oudefontein and Khartoum - that cover the period AD 1470 – AD 1800 (Maggs 1976:44). There is, however, one seemingly anomalous Riet River burial located far to the west at Weltevreden near Plooysburg and dated to 3360 ± 60 BP (Humphreys 1974) (Fig. 1) which, if reliable, suggests an undeniably 'San' antiquity for the very distinctive Riet River burial pattern.

## DISCUSSION

### Authoring Riet River burials and Type R settlements

The Poortjie burial is typical of the very distinctive Riet River burial pattern (*e.g.*, Morris 1992:26-29). It is a deep (0.67 - 1.0 m), stone-capped oval grave pit housing a seated and vertically flexed female skeleton with associated grave goods. The presence of exotic cowrie shells shows a people with extensive social and trading networks. This is supported by the answer given to Burchell's 1811 query to the cowrie-wearing San: "On inquiring whence these [cowrie] shells had been procured, I could get no further information than that of their having being obtained from their neighbours by barter" (*vide* Humphreys 1975:25). Such barter may have extended to their pottery too; at least in terms of cultural interchange. In a related manner the Riet River burials share elements with Khoe, San and Black farmer's burial patterns. For example, Silberbauer recorded for the Khoekhoen: 'Burials having a grave covering of stone cairns found with the body interred in the vertical-flexed position and stones placed on, around and below the deceased are key attributes of pastoralist (Hottentot) mortuary practices' (1979:61; see also Barnard 1992:192-193,252). Gatherer-hunter San burials are extremely rare in the central interior and are shallow, seldom have any capping and may have simple grave goods (Morris 1992:65). Black farmer's graves tend to be dominated by males and infants buried within the settlement precinct; often in the cattle kraal or its walls. Grave goods, cairns and the vertically flexed position are common (Morris 1992:66-67). Perhaps what distinguishes the Poortjie burial is that it is not an isolated inhumation. Within 35 m of it in locations not threatened by erosion there are at least 6 stone cairns visually identical to Riet River burial cappings. Similar cemeteries have been noted for other Riet River burials (*e.g.*, Morris 1992:26-28). These cemeteries are all adjacent to Type R settlements and 42,5 m to the north-north-east of the Poortjie burial is a Type R settlement that consists of a 25 m – 30 m diameter primary enclosure and at least five smaller enclosures (Fig. 2). An episodic low stone wall encircles about 40% of this settlement. There are more than two dozen pan-shaped lower grinding surfaces and one lenticular such surface in and around this settlement. There are also rocks that show signs of having sharpened metal

**Fig. 5: Plan and section photographs of the Poortjie burial.**

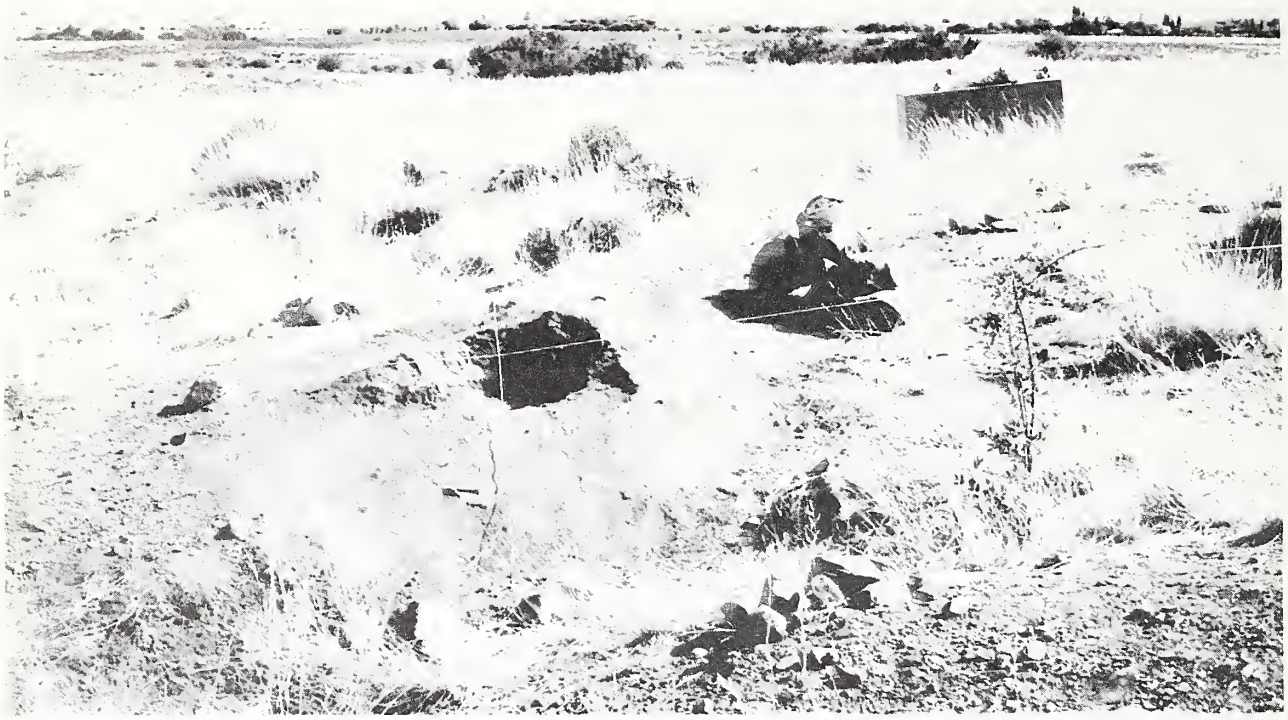

Fig. 6: Photograph of the Poortjie burial after excavation showing grave pit.

Fig. 7: Poortjie grave goods – three cowrie shells and a miniature bowl.

**Table 1. Dated Riet River Burials.**

| Skeleton's Locality | Lab number | $^{14}C$ years BP | Calibrated date | Reference |
|---|---|---|---|---|
| Weltevreden, Herbert District, Northern Cape. | Pta-681 | 3360±60 | Uncalibrated | Humphreys 1974 |
| Welteverde, Koffiefontein District, Free Sate. | Pta-2898 | 890±50 | AD 1060 | Morris 1992:32 |
| Lentelus, Koffiefontein District , Free State. | Pta-2894 | 390±50 | AD 1560 | Morris 1992:32 |
| Oudefontein, Koffiefontein District , Free State. | Pta-247 | 380±50 | AD 1570 | Maggs 1971:56 |
| Poortjie, Koffiefontein District, Free State. | Pta-7923 | 250±45 | AD 1655 (1669) 1681; 1749-1806 | This paper |
| Oudefontein, Koffiefontein District, Free State. | Pta-248 | 110±50 | AD 1840 | Maggs 1971:56 |

objects. Two halves of a square and an oval bored stone with very narrow perforations lay within one of the smaller enclosures. There are many informal Later Stone Age lithics and thick pottery fragments. A small but steep-sided gully or 'kloof' with semi-permanent water is located 140 m north-north-west of the Type R settlement and 310 m north-west of the grave. On the 'kloof's' western side a split dolerite rock bears two patinated rock-engravings of roughly pecked-infill human figures with their arms held out at 90° to their bodies and with a protrusion between their legs. These images could be either San or Khoe authored. On the 'kloof's' eastern side there is a dolerite 'gong rock' such as are often associated with San rock-engraving sites (Ouzman 2001). The Poortjie burial and its associated archaeological context supports the notion that Riet River burials are directly linked to Type R stone-walled settlements and both belong to a Khoe-San people practicing a mixed and transhumant economy. The careful inhumation, grave goods and cemetery points to a structured cosmology, possible social stratification and indicate that these people had strong ties to specific places.

**Human remains and archaeological ethics**

While useful information is gained from excavating human burials – often a concentrated locus for the expression of identities, beliefs and world-understandings (*e.g.*, Parker-Pearson 1999) - the practice of disturbing the intentional inhumation of a person from a culture other than one's own remains a profoundly disturbing experience (*e.g.*, Bahn 1984; Barley 1997). Burials are perhaps the most powerful instance in which archaeology crosses over from being a dispassionate investigation into the past into being also a highly emotive practice in the present. On the one hand, we could argue that intentional inhumations were never intended to be exhumed and even when such burials are threatened by the elements our etic intervention is not required as nature shall and should take its inevitable course and reclaim the remains. On the other hand, the excavator adheres to a code of ethics and has an obligation to extract knowledge and preserve what he or she can of an ever-vanishing material record so that the information obtained can be held in trust for the nation as a whole (*e.g.*, Rahtz 1974). To these two polarities the Southern African political and cultural firmament adds a twist. Perhaps an archaeological understanding of the events and practices that led to the burial of the Poortjie and similar people may be used to aid and shape the rise of Khoe-San nationalism by providing an empirical basis for the reclamation of elements of land, language and culture that have been lost or lacking over the years. The Poortjie and similar burials

are immediately important to the present need of the Khoe-San to establish a distinctive identity, to re-assert custodianship of their culture and to engender a mutual respect and empathy (*e.g.*, Legassick & Rasool 2000; Tomaselli 2001). For example, certain Griqua individuals wished for remains thought to be Cornelius Kok's to 'lie in state' in a Museum before being reburied (Jacobson & Morris 2000:81; see also Hubert 1994); suggesting that Museums may have a function as high-status 'Keeping Places' for some human remains (Ouzman 2000:89-90). The Vermillion Accord on Human Remains provides a sound set of guidelines for the treatment of human remains (Fig. 8; see also de Jong 2001). Ideally, Khoe-San archaeologists should make the decisions on what to excavate and research. Until then, non-Khoe-San archaeologists can engage in partnership with Khoe-San representatives and make such decisions jointly. Here the Kouga 'mummy' is an example of such co-operative negotiation with archaeologists permitted two years to study the person and share the information, after which he will be reburied with due ceremony (Binneman 2000). In this case study, the uncertain identity of the Poortjie individual as broadly 'Khoe-San' combined with the absence of representative Khoe-San structures in 1997 conspired to make for both a rewarding and uncomfortable experience. Fortunately, representative Khoe-San structures such as the National Khoisan Consultative Conference (NKCC), South African San Institute (SASI) and the Working Group of Indigenous Minorities of Southern Africa (WIMSA) do now exist and can and should be consulted before human remains and other sacred objects are studied. Excavation, especially of burials, remains a fraught endeavour and one is here in mind of Sir Mortimer Wheeler's observation that: "When I'm dead you can dig me up ten time for all I care...I won't haunt you – much" (*vide* Bahn 1984:214).

## NOTE

1. I use 'San' to refer to Southern Africa's First People who traditionally gathered, hunted and practiced a shamanistic form of religion. I use 'Khoe' and 'Khoekhoen' to refer to immigrant pastoralist people linguistically related to the San. I regard both as honest and honourable terms and recognise that both groups had much in common, particularly in historic times.

## ACKNOWLEDGEMENTS

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# The Vermillion Accord on Human Remains

## Adopted at the 1989 South Dakota World Archaeological Congress Inter-Congress.

1. Respect for the mortal remains of the dead shall be accorded to all, irrespective of origin, race, religion, nationality, custom and tradition.

2. Respect for the wishes of the dead concerning disposition shall be accorded whenever possible, reasonable and lawful, when they are known or can be reasonably inferred.

3. Respect for the wishes of local community and relatives or guardians of the dead shall be accorded whenever possible, reasonable and lawful.

4. Respect for the scientific research value of skeletal, mummified and other human remains (including fossil hominids) shall be accorded when such value is demonstrated to exist.

5. Agreement on the disposition of fossil, skeletal, mummified and other remains shall be reached by negotiation on the basis of mutual respect for the legitimate concerns of communities for the proper disposition of their ancestors, as well as legitimate concerns of science and education.

6. The express recognition that the concerns of various ethnic groups, as well as those of science are legitimate and to be respected, will permit acceptable agreements to be reached and honoured.

**Fig. 8: The Vermillion Accord on Human Remains.**

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# SISTER MARIYA'S ACCOUNT OF SAN PAINTING IN THE TSOLO DISTRICT IN THE LATE 1920's AND EARLY 1930's

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## ABSTRACT

Some notes are presented of San painting and hunting among Mpondomise as witnessed by Sister Mariya CR (1913-1998) during her education at St Augustine's School, Tsolo, 1926-1933.

## BACKGROUND

Jolly (1999) has sought to identify the last San informants from the Tsolo District, Eastern Cape. This information was brought to my attention by Lita Webley with the suggestion that general information about a San presence in that district in the 1920's and 1930's might be of some interest to archaeologists. What follows is based on my notes of the recollections (as jotted down during interviews) of an 83 year old nun, Sister Mariya CR, of her orphaned adolescence at St Cuthbert's Mission, Tsolo, between 1926 and 1933.

While writing *The Prophetic Nun* (Butler 2000), one of my chief informants was Sister Mariya CR. I interviewed her at least four times at St Luke's, Donkin Street, Grahamstown, between 1996 and 1997. The purpose of these interviews was to gather information about the work of artist nuns, Sister Margaret CR and Sister Pauline CR. By chance we discovered a mutual amateur interest in the San, and she volunteered information spontaneously and responded to my occasional questions. Among my copious notes are many peripheral observations by her on the San. These memories were not elicited by the questions of an expert in search of information about the San. They are marginal and incidental, and based on the scribbled notes of an amateur. The memories are those of someone who had been completely at ease with the San as an adolescent. She liked remembering those times.

There were only three real, wandering San families in the area, she said, but there were also several mixed families, in which the husband was a Xhosa and the wife San, or part San. These were generally accepted in Xhosa social life. This meant that she had first hand experiences of both pure San and Xhosa customs, and was at points painfully aware of the differences between the cultures. The few pure San were hospitable and seemed to have enjoyed playing hosts at feasts and dances attended by more participants than they alone could rally.

On 7 April 1996, I used these notes for a brief thumbnail sketch of her life and character, including only what seemed relevant to the biographies of the artistic nuns. Fortunately, I did not throw my pages of jottings away. As her unusual origins equipped her for her exceptional experiences, a sketch of them is necessary.

## BIOGRAPHICAL DETAILS ON SISTER MARIYA (1913-1998)

Mary McAllister was born in 1913, in Idutywa, Transkei; daughter of Alexander McAllister and Norma Nozana, a Xhosa social worker. Her mother died in 1923 when she was ten years old. McAllister sent his children to school at St Cuthbert's Mission, Tsolo, to which St Augustine's was attached. He did not succeed in establishing a new home to which his so-called 'coloured' children were happy to return.

The reliability of Mariya's memory is corroborated by the following account of the McAllister children's relationship with St Augustine's obtained from Sister Joan Elizabeth, archivist of the Community of Saint Mary the Virgin, Wantage, England (Letter 30/09/1999).

"Mary (Sister Mariya) and two of her sisters, Nancy and Elsie, arrived in 1926/7. Elizabeth and Michael came in 1928, brought by brother Monty, who did not live at home. They all seemed to have been cut off from their family life, and did not go home for school holidays".

*** Prof Guy Butler submitted the above article to Southern African Field Archaeology in March 2000 and was in the process of making corrections when he passed away in 2001. On the advice of one of the referees, the editors have decided to publish the manuscript unedited. We do so as we believe this is a valuable account of the way of life of the last of the south-eastern San. Unfortunately Prof Butler was not prepared to allow an archaeologist to interview Sister Mariya before her death in 1998, so that much of the finer details of this account has been lost.**

Clearly, Alexander the widower could not manage his children. Sister Mariya volunteered that "we were shuttled about amongst relations" presumably of Norma, who might not have been particularly welcoming to 'coloured' children.

The author submitted Sister Mariya's recollections to Prof D. Hammond Tooke, who knows the area well. He writes, "Rest assured, I know nothing that would impugn the reliability of Sister Mariya's evidence. Everything she told you rings true. I also heard stories of the famous three families living on the Inxu River" (14/04/2000).

## CONVERSATIONS WITH SISTER MARIYA (1996-7)

"What were the Bushmen like?" I asked. "Little chaps", said Sister Mariya with a careful gesture, "about four foot high". The three San families came and went unpredictably in the Tsolo mountains. This is compatible with Jolly's account (1986:6-9).

But most pertinent to the situation in which Mariya became acquainted with them is the distinction maintained between the pure San hunter-gatherers and the part-San cattle keeping pastoralists like the mixed Mpondomisi. That they joined forces for feasting and hunting seems clear.

How (1962:33) reported on her conversation with a Mpondomisi who knew and understood the double standard well, "Mapote was one of the younger sons of the great Chief Morosi. He was born at Bolepeletsa, his mother being Pondomisi and an inferior wife of Chief Morosi... He told me that he and his half-bush stepbrothers, the sons of Morosi's Bush wives, used to paint at one end of the cave, whilst the true Bushmen painted at the other".

For the most part Mariya is remembering life in mixed San/Mpondomise families, and she is aware of this divide. With these mixed families she spent much time, living with them in their huts, and learning a great deal from the San wife/mother. "They were affectionate and sweet natured. I made many friends among them".

She made repeated references to "St Augustine's in the mountains". It became clear that she was referring to some other place called after Augustine than St Augustine's School, which is within walking distance of St Cuthbert's. And there is indeed such a place to the north-west in the direction of Maclear. It was founded in 1865, "but is now an outstation of St Cuthbert's Mission" (Cowley Evangelist July 1904:157).

At no point did I ask a question about language, but I presume that they communicated in Xhosa, her mother's tongue. She did, however, volunteer that she learnt the San clicks. This might mean that she learnt those clicks which had not already been incorporated into Xhosa speech in past times. The survival was sufficient to warrant attention, in 1932, of the linguist Dr H. Anders who interviewed two speakers in the Tsolo district (Jolly 1999:62).

The real 'unmixed San' came and stayed in the caves for varying lengths of time, and then disappeared. She "never discovered how far it stretched. They moved from place to place, following the game". They were very mobile. "I met a party of their women at the Bashee". It seems probable that they made excursions into Lesotho.

The missionaries did not mind the children mixing with them either. "There was no trouble with the Fathers (Society of St John the Evangelist) except when the Bushmen stole stock". "They lived a very pleasant family life. They were great entertainers. Dancing and eating went together. After a hunt, the prey was brought to be shared. They had no pots. The meat was roasted on the coals". "They wore skin aprons back and front. They painted their bodies, black and white, all over at special times; on the face with dots, straight lines on the body". This tallies well with Stow (1905).

"The children never went to school at all". Had she seen them painting? "Yes, the inside of their huts". "Did you see them painting on rocks or caves?". "Yes. In the caves near St Cuthbert's. Both men and women painted, but not on the same painting. Otherwise they worked together, real Bushmen".

She volunteered authenticating specifics. In the context of body painting, usually before dances, and hence before the blood of the kill was available, she said: "The paints were mixed with chicken or bird droppings, *not* (emphatic) the white of eggs".

"They used earth colours. They were very particular where they got their clay, it had to be just the right clay from certain dongas".

What did they use for a brush? "It was made from the root of a bush which turns to fibre when you knock it between stones" (see Jolly 1999:61).

She returned to the matter of painting several times, of their bodies for special occasions like dances, the inside of their huts, and of rocks and caves. Most interesting was the observation that everyone painted, both men and women. She never mentioned a specialist San painter or shaman. When they used blood for painting they mixed it with the juice of a plant which stops clotting. Their favourite colours were brown, orange and black. She mentioned protracted feasting and frenzied dancing around the fire, the men close to the flames, the women singing and hand-clapping. She never saw nose-bleeds nor witnessed a laying on of hands.

What did they paint? She was not very clear in her recollections. "Cattle and people. Cattle being pursued by people, and trying to kill one". She then said, somewhat inconsistently, it was "a real hunt, not to torture. When the Xhosa pursue the cattle, the beast that cried (bellowed) was chosen for the death, which was not cruel".

When questioned on this fascinating comment, she said that by "a real hunt" she meant that a single animal had been stalked and shot with bow and arrow. But in a real hunt the animal would have been an eland or other buck, not cattle, however. Perhaps there were no eland available and the San had to make do with cattle. (For the substitution of eland by cattle, see Campbell *et al.* 1994:155-6).

From some of her observations, it seems that there were select hunts, feasts and painting sessions for the few San left (three families) and open feasts and hunts in which the mixed families might join.

"The paintings (at the caves) was done during and after a feast. For a proper hunting the feast took place in the cave". In addition to the fire made in the cave after a proper

hunting (which would, presumably, be hosted by the `real' Bushmen) there were other feasts. "They had a great feast whenever there had been a kill, much celebration and dancing themselves into a frenzy, not in the cave but in front of it". This could have been dictated by the need for space. Most caves are `overhangs' with limited and irregular floors.

This timing of hunting, feasting and painting accorded well with the impression conveyed by my rock-art reading, and led to the question; "Were the paintings holy?". "Oh no! The paintings were not holy. There was nothing holy about the Bushmen. Everything was just natural".

"But were not the eland very special?". "The eland was quite a part of it, because it gave a lot of meat". Animals were hunted individually. She never witnessed "a wholesale slaughter on animals". The San killed the animals in "a proper hunt, with bows and arrows". She insisted on this. Xhosa hunts were frequently aimed at killing many animals, by ambush or encirclement.

She said some paintings were done "high up in the mountains, far away". The painters found painting very relaxing. These sessions seem to have been different from the paintings that were done at the San home with frenetic feasting and dancing. She remembers them painting "funny animals with long necks". This could support the thesis that while painting was a normal activity which anyone might enjoy, there were special places for painting unusual animals, creatures with long necks (not game or cattle), places characterised by deep relaxation (trance?) and not by eating and dancing around a fire.

She emphasised San knowledge of the medicinal, sedative and poisonous properties of plants. They used herbs for medicines, were "great takers of snuff made from a special tree", she thought a sneeze wood. They were also "great smokers with clay pipes, and planted both tobacco and dagga. They sucked the pipe through a reed and spewed out water".

Broster (1982:87) ascribes important healing functions of the Xhosa *amagqirha* to the San pharmacopia. "Their (Xhosa patients') psychoses are controlled through the use of sedatives, herbal extracts and snuffs being administered as tranquilisers". Any doubt about the San influence on *amagqirha* is dispelled by their use of "a black powder called *intsizi yaba Thiza* (the powder of the Bushmen") (Broster 1982:80).

She did have some first-hand, if brief, acquaintance with the San of South West Africa. By 1933 she had moved to Sonnebloem College, Cape Town. At the age of twenty, she was a member of a party of student teachers who went to that territory. She was now a tourist, not a participant. Their experience of the San had been organised. Their vehicle was followed by a large number of men. She thought their antics were those of "show-offs". They were very clever at imitating the movements of animals. During one dance "the men made a drumming noise from the bottom of their stomachs".

It is to be regretted that she did not link the "drumming sound" to a dance imitating a particular animal. There are two obvious candidates. The roar of the lion strikes terror into the living world, yet the noise which a male ostrich can make is more impressive. Bleek and Lloyd (1911:126-35) provided the following reason, "The male ostrich was some distance from the women when the lion roared. The women did not applaud. But when the ostrich called, sounding afar, the women exclaimed "I do wish the lion called in this manner, for he sounds as if he put his tail into his mouth, while the ostrich calls in a resounding manner" ... "The ostrich calls with his lungs ... from his chest's front. Thou dost call with thy mouth, therefore thou dost not call nicely".

Dorothea Bleek (1928), while among the Naron of the central Kalahari, watched "about six Bushmen in a circle performing the Ostrich Dance". It seems probable that Sister Mariya, about a decade later, witnessed something similar. But she speaks of these San as a tourist might of foreigners, not with the pleasant familiarity which marked her childhood recollections.

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# MID-HOLOCENE DENTICULATES IN THE RICHTERSVELD

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## ABSTRACT

This paper introduces a category of formal tool type that was found recently on the mid-Holocene open site of Jakkalsberg N in the Richtersveld, Northern Cape Province, South Africa. All the tools are microlithic and have very finely crafted denticular edges made on a variety of straight and convex edges. There are sufficient similarities in the items to suggest that these are more than simple expedient tools. We are requesting information on similar tools observed by other researchers.

## INTRODUCTION

Jakkalsberg N (JKB N) and 3 other sites were excavated recently as part of a contract with Trans Hex Mining Ltd. (Halkett 2001).The site lies on the hard, compact mudflats of the Orange River flood plain to the east of the Jakkalsberg, and not far to the south west of the settlement of Sendelingsdrift in the Richtersveld National Park (Fig. 1). The site is one of many documented in the area but one of only a handful that have so far been excavated (Robertshaw 1978, Webley 1992, 1997, Smith *et al.* 2001). The herder sites JKB A and B excavated by Lita Webley lie approximately 200 meters to the east (Webley 1997).

Although consisting primarily of a deflated scatter of stone, ostrich eggshell beads, engraved fragments and the occasional piece of water container mouth, small amounts of marine and freshwater shellfish, a few pot sherds and historical artefacts are also to be found. The presence of a number of formal stone microliths and a relatively high proportion of siliceous raw materials in relation to quartz, indicated that the site was likely to be older than the distinct pottery-rich pastoralist sites that occur in the vicinity. A corrected date of 4320 ± 50BP (Pta-8496) was obtained from ostrich eggshell collected off the surface and seems to confirm the original assumption.

Over 1400 squares (0,5 x 0,5m) were excavated to a depth of about one to three centimetres over a fairly level, compacted and sun baked silt deposit that is more resistant to erosion than the sandier deposits above. Despite deflation, some spatial patterning has been maintained. So far, the artefacts from 515 squares have been analysed and have produced a total of 16 688 flaked artefacts. With close to two thirds of the assemblage still awaiting analysis, we anticipate the total count to be in the vicinity of 46 000 artefacts.

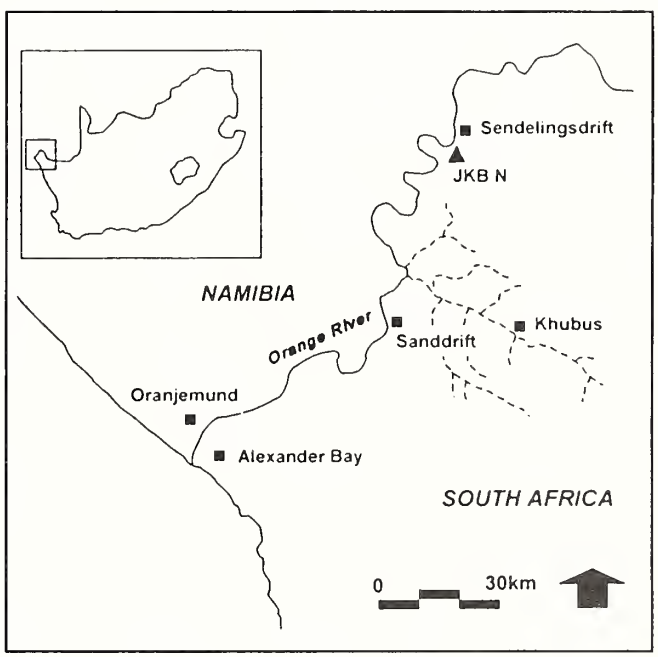


**Fig. 1. Map showing the location of the Richtersveld.**

## THE ASSEMBLAGE

The lithic assemblage is composed mainly of quartz (67,79%) with crypto-crystalline silica (CCS) (20,77%) and quartzite (10,65%) being the other main raw material

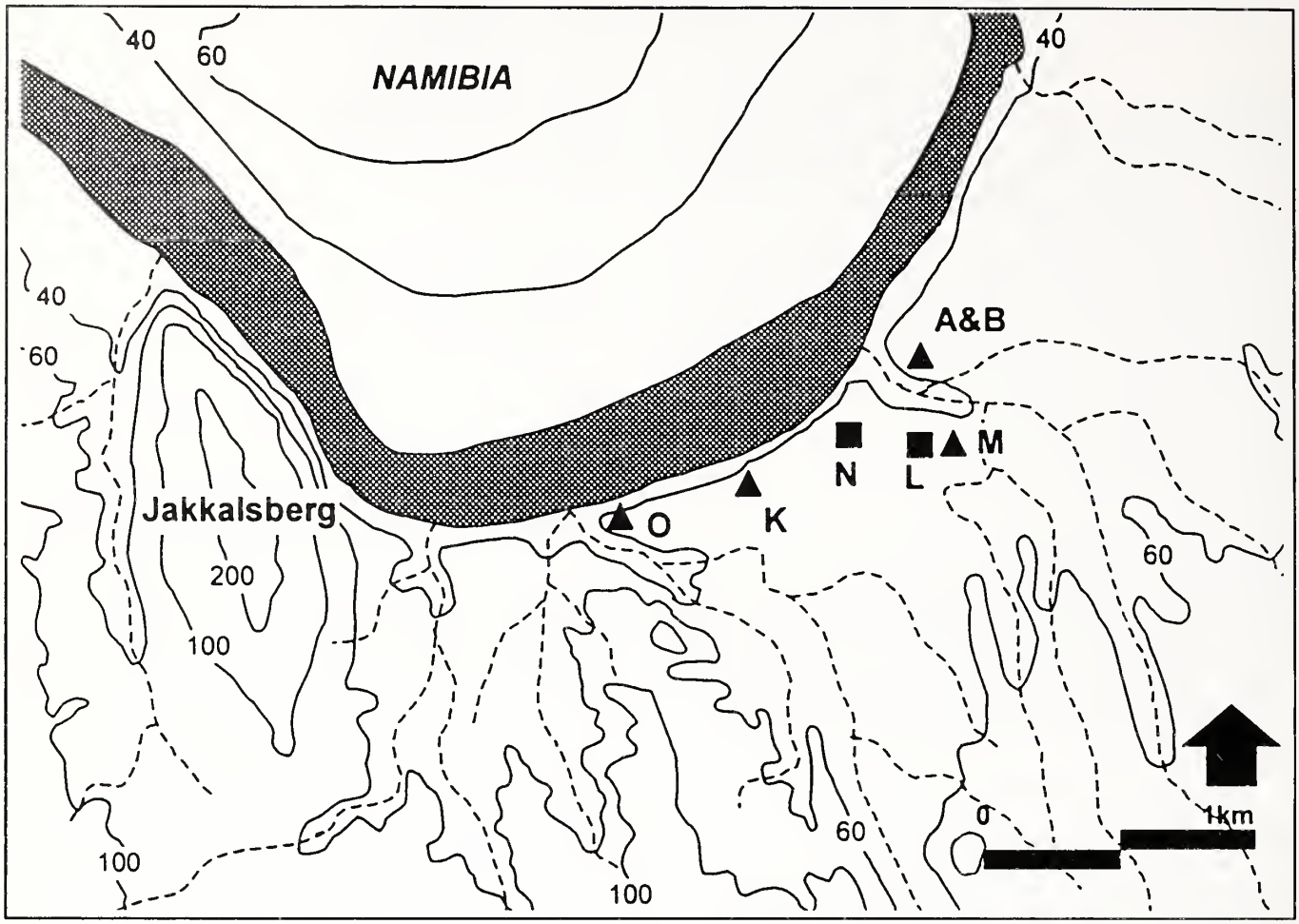


**Fig. 2: Map showing the location of JKBN 1 and other sites in the immediate vicinity. Known and presumed herder sites with abundant pottery are indicated by triangles and those with very little or no pottery are indicated by squares.**

contributors. The total proportion of formal tools is 1,33% with 71,62% of these being on CCS and the balance on quartz. Utilised flakes are relatively scarce contributing only 0,8% of the flaked assemblage. A little more than half of these are made on CCS, with all but one of the remainder with 71,62% of these being on CCS and the balance on quartz. Utilised flakes are relatively scarce contributing only 0,8% of the flaked assemblage. A little more than half of these are made on CCS, with all but one of the remainder being made on quartz.

Most of the cores are of the irregular type (46,83%) with single platform cores (28,57%) and bipolar cores (24,60%) accounting for the rest. Almost all of the bipolar, and a little over half the irregular cores are made on quartz. Single platform types are evenly divided between quartz and CCS. Included amongst the CCS ones are 4 conical single platform bladelet cores. It is clear from the above data that the better quality and scarcer CCS pebbles were targeted for higher artefact yields, while quartz, which is readily available in abundance in both pebble and vein form, was frequently struck opportunistically by means of the bipolar technique in the hope of producing usable flakes and bladelets. It is likely that most of the bipolar cores are made on river pebbles while the irregulars and single platforms are made on vein quartz.

The total of 222 formal tools so far analysed includes 22 backed blades and bladelets (9,91%), 9 segments (4,05%) and 17 backed scrapers (7,66%). Although it is recognised that there may be some subsequent overprinting by later material, it seems clear that the majority of artefacts were deposited during mid-Holocene occupation.

The radiocarbon date is consistent with the pre-pastoralist nature of the overall assemblage. The presence on the site of small amounts of highly fragmented Khoe-khoe ceramics is we believe unrelated to the lithics, but rather derived from the general herder presence in the immediate vicinity for the last 2000 years (Fig. 2).

## THE DENTICULATES

Thus far, 12 denticulates representing 5,41% of the formal assemblage, have been recognised (Fig. 2). There is significant variety in form among these artefacts, but all possess similar, minute notches forming fine denticular edges. The cross-sections of the notched edges vary. Two

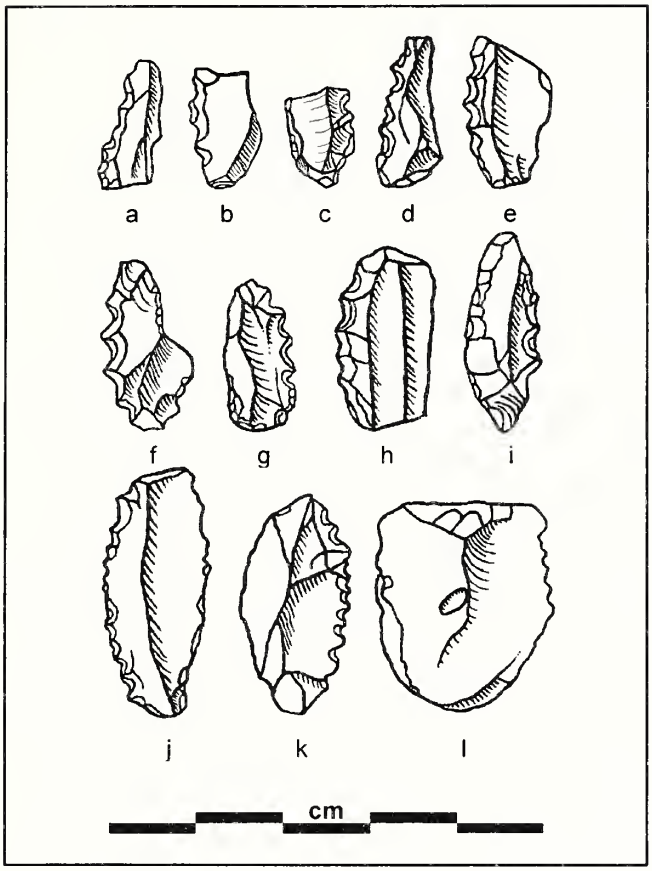


**Fig. 3: The twelve denticulate pieces so far analysed. All artefacts are lying on their ventral surfaces and have their butts down.**

(k, l) are made on sharp cutting edges, 7 are on scraper-like edges (b, c, d, f, g, h, j), and the remaining 2 on steep edges (a, i) (angle in degrees?). One is on an edge between that of a scraper and a backed piece (e). Some range in the size of the notches is evident, with some being very small (j, k, l) and others quite large (d, f, g, i). The smaller notches are very closely spaced, with for example, no fewer than 12 having been applied to 20 mm of edge (j) or 10 to a 16mm edge (k).

It is unclear whether the notches were applied to already retouched margins. Experimentation suggests however that the notches may have been made first, and that a sharp, strong edge, possibly that of another flake, would have to have been used to make them.

There is considerable variety in the edges opposing the denticulation. They include 3 that are backed (f, g, j), 2 that are clean and sharp (h, k), 1 has a perfect scraper edge opposing (i), another has a scraper-like edge which has only been very lightly retouched (c), and 2 show edges that are partly utilised (a, e) of which one also has a small section of retouch on the utilised edge. The balance of the tools have edges that do not adhere to any particular shape nor show any signs of use (b, d, l).

Although similar denticulates have been found at Oakhurst, near George in the southern Cape Shelter, the notches on these pieces have been made on sharp, straight edges and were interpreted as saws (Schrire 1962). They were recovered from the base of a layer dating to between 3450 and 7910 BP (Deacon 1979). The JKB N notched edges are almost all gently convex and, with their variety of edge angles, could not be interpreted in the same way. Two tiny segments with denticulate retouch along their chords were recovered from the levels dating to between 6100 and 7750 BP at Byneskranskop 1, near Gansbaai (Schweitzer & Wilson 1982). These two artefacts are only 7 and 8 mm long respectively and, although they are described as 'saw-edged' (*ibid*:62), no further suggestion as to their function is offered.

## CONCLUSION

The above discussion introduces a category of formal artefacts, the likes of which, as far as we know, are not common during the Later Stone Age in South Africa. They show considerable variety in their morphology when compared to each other but have consistently similar notching. All the artefacts from JKB N, although possessing similar notches to the other examples of LSA denticulate artefacts mentioned, are clearly different in terms of overall shape. In addition, this class makes up a much greater proportion of the formal assemblage than ever observed previously. As our analysis of this and other excavated sites is ongoing we are unable to say how widespread these tools will be, but we would welcome information from other researchers who may have noticed similar tools.

## ACKNOWLEDGEMENTS

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# REASSESSING THE EXCAVATION OF THE CHURCH STREET WATER FURROW, PRETORIA, BY MAKING USE OF HISTORICAL SOURCES

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## ABSTRACT

The results of the excavation of a water furrow, discovered in central Pretoria during 1994, were published in a previous issue of South African Field Archaeology. However these were not complete, mainly because of the time constraints placed on the researchers, as it was a rescue excavation. Only a selection of historical sources were used to obtain information on the site. In this article, the information regarding the furrow is expanded and reassessed in order to determine the correct date and function thereof. All available historical sources were critically compared in order to assess their reliability and accuracy.

## INTRODUCTION

When construction work was being carried out in Church Street in central Pretoria during 1994, the remains of a water furrow were unearthed. This discovery eventually led to the National Cultural History Museum being contracted to investigate the feature by means of an archaeological excavation. Findings of the initial research in this regard were published in this journal (Van Schalkwyk *et al.* 1995), but it was suggested that more detailed research should be carried out (see abstract in 1995).

Thorough research is a time-consuming activity. Sufficient time was not available to the researchers, as construction work had to be continued on the site as quickly as possible. This resulted in the researchers being unable to investigate all the possible historical sources, and led to misinterpretation of the history of the site. This is a major problem, since it frequently happens that archaeologists are not allowed enough time for investigation when sites are unearthed during construction activities. Although this might not always influence the excavation of the site, it does have an effect on the auxiliary research, especially in the case of historical sites.

By reassessing the information regarding the water furrow, new aspects came to light. These issues will be discussed in the article, but reference will be made to the previous research in order to put the results in proper context.

## LOCATIO N

The water furrow is situated on the southern side of Church Street, between Prinsloo and Van der Walt Streets (Fig. 1). This is in the city centre of Pretoria, directly in front of the State Theatre. The coordinates of the site are 25.44.46,5S; 28.11.39,3E, on map 2528 CA, Pretoria, of the South African 1:50 000 topographic series.

## SITE DESCRIPTION

A full description of the site was given when the results of the excavations were published (Van Schalkwyk *et al.* 1995:78-79). Therefore only a photograph of the furrow is included to show what it look like (Fig. 2). It is also sufficient to say that since the founding of Pretoria in 1855, the area has been subject to continual change owing to urban development.

During construction work on the site various remains of former features were discovered. These included different layers of tar representing former road levels, rails for trams that were used as public transport during the first half of the nineteenth century, a drain, a concrete slab and a second furrow in Van der Walt Street, running at right angles with the one in Church Street (Van Schalkwyk *et al.* 1994:2-3).

During the course of 1998 construction workers unearthed another water furrow on the southern side of Schoeman Street, between Prinsloo and Du Toit Streets.

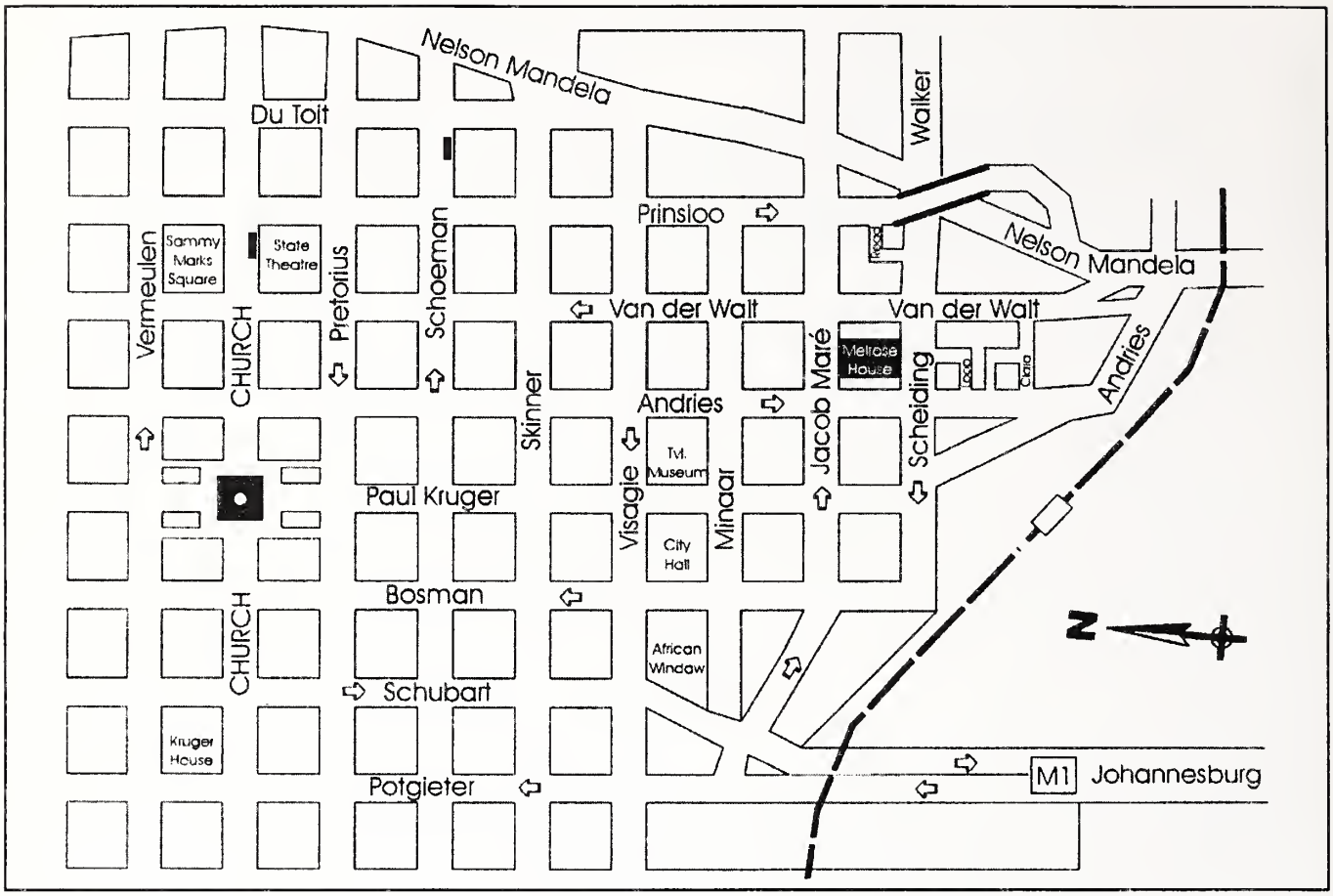


**Fig. 1. Location of the furrow under investigation in Church Street, Pretoria Central, and the one found during 1998 in Schoeman Street.**

This furrow was similar to those in Church and Van der Walt Streets. It was recorded for comparative purposes, and as an aid in further putting together the history and layout of the water furrow system of early Pretoria (Van Vollenhoven 2000:253, 256).

## SUMMARY OF PREVIOUS RESEARCH

The research undertaken by the National Cultural History Museum needs to be summarised in order to understand the additional research leading to new interpretations. The historical research indicated that water was provided to Pretoria by means of a system of furrows, which were dug since 1860. A map drawn in 1879 showed some water furrows, but did not indicate one on the southern side of Church Street (Van Schalkwyk *et al.* 1995:79). This implied that the furrow had been constructed after 1879 and gave rise to three probable explanations for its function.

The first possibility was deduced from the fact that the furrow is situated on the southern side of Church Street. As the town centre slopes downwards towards the north, one could expect that irrigation furrows would be on the northern side of the street. It could, however, have been a main furrow providing water to the eastern side of town (Van Schalkwyk *et al*. 1995:82).

The second possibility is that it served the purpose of a stormwater ditch that had to drain excess water from the market square (which was situated on the corner of Church and Van der Walt Streets) to the Apies River to the east. This could also explain why the furrow was much deeper than the one in Van der Walt Street (Van Schalkwyk *et al.* 1994:24).

The last possibility is that the furrow provided water to the mill of Stephanus Meintjies. The mill was situated further to the east and had already been in use during 1880. This could also explain why the furrow was so deep (Van Schalkwyk *et al.* 1995:79).

The researchers were only able to give a broad indication of dates for the furrow. It was concluded that it was built after 1860, but before 1880. The reason for this was that the building of the market square in 1879 covered the area where the furrow was found, therefore it must have been built prior to this date. It was probably used until approximately 1910 (Van Schalkwyk *et al.* 1994:24; Van Schalkwyk *et al.* 1995:82).

The archaeological evidence did not cast much light on the dating and function of the furrow. The contribution of the archaeological excavation was that it provided a full record of the method of construction. Artifacts dating from the turn of the century (the late 1890s) suggested that it was still in use during those years (Van Schalkwyk *et al.* 1994:23; Van Schalkwyk *et al.* 1995: 82) and the presence of Coca-Cola bottles and plastic water pipes, proved that the furrow had been uncovered and covered again

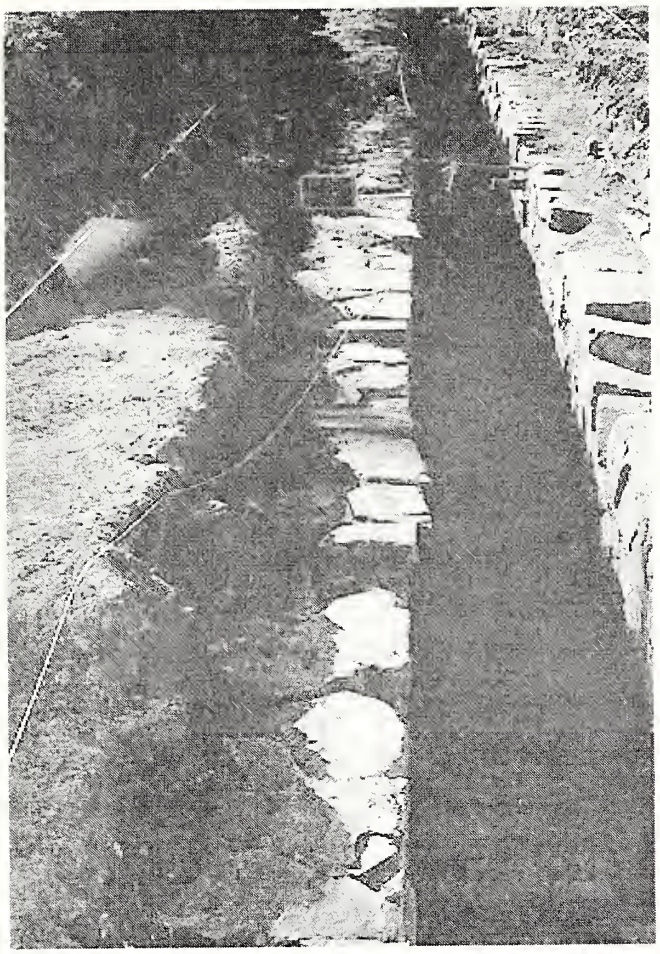

**Fig. 2. The completed excavation 1 showing the furrow (Photograph by F.E. Dreyer).**

frequently during recent years. Staff members of the City Council's Water and Electricity Department confirmed that they had frequently found similar furrows in other parts of the city during their activities (Van Schalkwyk *et al.* 1995: 81-82).

## DISCUSSION: REASSESSMENT OF THE HISTORICAL CONTEXT

It has already been mentioned that the research undertaken by the Museum was constrained by the time limits placed on the investigation of the historical sources. Additional research in connection with the water furrow system of Pretoria was later undertaken. It included a study of the relevant literature and an archival search for photographs and maps, as well as a computer search for documents in the National Archives depot. This research was integrated with the research work previously carried out by the Museum, in order to obtain a full picture. The sources were also subjected to the process of internal criticism in order to determine their credibility.

A letter, written by Fieldcornet A.P. van der Walt to President M.W. Pretorius, was used by Rex (1960:62), Pieterse (1942:25) and Peacock (1955:50) as a source. It indicated that excavations for a water furrow from the Fountains Valley to Church Square had started in 1854/5. The purpose of the furrow was to provide water for Pretoria, and it had been dug by Van der Walt himself. By April 1855 the furrow had been completed up to the entrance ("die poort") to the south of the town (Peacock 1955:50).

In 1857 the "landdrost" (magistrate) of the town, A.F. du Toit, offered to bring order to Pretoria by providing roads, trenches and sewage, as water was streaming around all over town. A dam and a furrow, which was to carry water to the town, was excavated up to the house of Van der Walt, on the southern side of Scheiding Street, in 1857 (Pieterse 1942:26). Pieterse derives his information from two archival documents, a letter written by Du Toit and a contract between the government and the contractors.

During 1858, Du Toit marked off a water furrow for the town. It started at Van der Walt's house in Scheiding Street and crossed Market Street (today Paul Kruger Street) close to Maré Street. From there it ran along the western side of Market Street up to Church Square (Pieterse 1942:27; Meiring 1955:150; Basson 1994:175). Peacock derived his information from a document written by Du Toit, now in the National Archives depot. He also made use of a survey map that was apparently drawn by Du Toit in 1857. It may therefore be assumed that his observations, as well as the map, are correct. Pieterse uses a letter written by Du Toit to the State Secretary, in which this information was repeated. Although the letter was only written in 1875, the information corresponds with that on the map. Meiring mentions that his information originated from a map drawn by Du Toit in 1859. This date seems to be correct, since Du Toit could not have drawn information on a map of 1857, as the work was only completed in1858. Although Du Toit (and therefore also Peacock) gives the date of the map as being 1857, it is probably the same map as the one of 1859. Basson uses an ortophotograph map (the standard series 1:10 000 maps of South-Africa) to arrive at the same conclusion. Apparently the brothers Vermeulen assisted Du Toit in this task (Du Preez 1978:8).

At this stage (1858) Du Toit had his own water furrow in Arcadia, and S. Schoeman also had his own to the south of Boom Street (Peacock 1955:51, 124). These were open water furrows. This is corroborated by the regulations for towns in the Zuid-Afrikaansche Republiek (ZAR) of 1857. These stipulate that no person, animal or poultry was allowed to soil the water furrows. A fine of 2 shillings was payable in the event of a person's animal being found in a furrow. Draught animals had to be outspanned at least 12 feet (3,6 m) from water furrows (Peacock 1955:54). In this case Peacock referred to the township regulations as published in the Government Gazette.

Since the main water furrow was lacking in capacity, tenders were requested during 1860 for the construction of means to ensure increased water supply. The tender of J.F. Schutte and A. van der Walt for the construction of a large dam and a large furrow for Pretoria at the sum of £120 was accepted. The furrow would run from the Fountains up to Church Square (Pieterse 1942:27-28; Peacock 1955:69). According to Pieterse (1942:28) a certain G. Ezel ultimately

took over the contract. This information was obtained from a report by J.L. Lys, who was a member of the Waterworks Commission of Pretoria. The original contract referred to previously (par. 3 of this section) was used by both as a source. According to Van Jaarsveld (1982:40), a contract for the construction of a dam had already been awarded to Schutte and Van der Walt in 1857, but this was not a success.

It is clear that the water furrow which ran from the dam in the Fountains Valley was 0,92 m (3 feet) wide and 0,45 m (18 inches) deep, and that it had been constructed on the southern side of Church Square. It also appears that smaller water furrows of 0,45 m (18 inches) wide and 0,30 m (12 inches) deep, were taken out of the main furrow around Church Square, to meet again at the lower end (the northern side) of Church Square in a single large water furrow (Pieterse 1942:28; Peacock 1955:69). Pieterse and Peacock once again referred to the contract. These measurements differ from that of the furrow archaeologically investigated (see Table 1), because the latter was a built-up furrow, paved with stone, while the above mentioned was a ground furrow (a furrow simply dug in the ground).

The government of the ZAR had undertaken to personally lay on water from the square to the various erven (Pieterse 1942:28). This project was undertaken in 1860, and it was completed in 1863 (Pieterse 1942:28-29). Once again the Lys report served as the source.

Eventually the water supply provided by the ground furrow was not sufficient for the inhabitants of the town (Peacock 1955:70). Although Van der Walt was allegedly still using this furrow around 1877 (Peacock 1955:125), the furrows in Pretoria at this time were so dilapidated that they were nothing but muddy ditches (Pieterse 1942:32). This suggests that these water furrows were not paved with stone, and did not have roofs, like the one that was excavated. A further indication of this is the description by Pieterse (1942:81) that strangers were looking for trouble if they walked about in the dark as water furrows were criss-crossing Pretoria.

The furrows were not deep, but were sometimes quite wide, especially at street crossings. This information dates from 1875, but is not clear from where Pieterse derived it. Peacock (1955:123) indicates a water furrow on a map which also dates from 1875. A photograph by Dunston (1975:21) shows a furrow on Church Square with a small bridge over it, as it had no roof. It is clearly a ground furrow.

In 1877 a certain Mrs Roche describes the water furrows as "tiny little dykes" in the streets of Pretoria (Lochhead 1913:53). In the same work (Lochhead 1913:55), an open water furrow in Market Street (Paul Kruger Street) is indicated on a photograph dated 1879.

Reference has already been made to the 1879 map of Pretoria. This map also indicates water furrows dating from this period (NAB 3/209). It shows a furrow running from the Fountains Valley along Market Street (Paul Kruger Street) to Church Square. From there it runs further along the southern side of Church Street. At Andries Street it crosses Church Street diagonally and runs along the northern side of the street up to Van der Walt Street, and then along the western side of the street further north. The furrow that was excavated is not indicated. It further becomes clear from the map that at that stage little development had been taking place in Pretoria and almost nothing further towards the east. This poses the question why such a large furrow was constructed to an area that apparently had no need for it. The previous deduction that the water furrow dated from the period after 1879, and that it was connected with the development of the eastern part of the town (Van Schalkwyk *et al.* 1994:5), therefore appears to be correct. This development took place during the 1890s. This interpretation is supported by the fact that there is no description of covered furrows from the period prior to 1879.

The possibility that the furrow could have supplied water for the mill of Stephanus Meintjies was also previously presented as an explanation, and in this regard reference is made to a photograph taken by Gros. Unfortunately Gros's photographs are not dated, but since he worked in Pretoria between 1877 and 1895 (Dunston 1975:102) there is a fair chance that the photographs date from the era after 1880.

Other maps showing water furrows date from 1892 (NAB, S2/102), 1893 (NAB, S3/487) and 1900 (NAB, 3/1 297). However, not one of these maps show a furrow in the area that was investigated. Every map of Pretoria in the strongroom of the National Archives depot was examined, but with the exception of those mentioned here, not one showed any signs of water furrows in Pretoria.

In Gros's photograph no. 383, a water furrow of stone, but without a cover (roof) is clearly visible. Various photographs of open ground furrows have been obtained from various other portions of Pretoria. A Gros photograph of Church Square in the 1870s with a bridge over a water furrow is known (Dunston 1975:20-21). A photograph of Market Street, dating from 1889, shows a wooden gangway over an open furrow (Dunston 1975:197). Photographs from Dunston, showing open ground furrows, include the north-western side of Church Square - 1891 and 1892, Church Street West - 1896-1899, Andries Street - 1901 and Market Street 1906-1911. Photographs at the National Archives depot show an open furrow dating from 1870 on the corner of Market and Skinner Streets (NAB, 20 777), another in Boom Street (NAB, 20 778), one in Van der Walt Street (NAB, 18 430) and one in Church Street East, but none to the west of the area investigated (NAB, 12 112). A photograph from 1879 shows an open furrow in Market Street, but a photograph from 1912 of the same area shows a sidewalk, with no sign of a furrow (Lochhead 1913:57). There is a possibility that the furrow in Church Street had also been in use between these two dates (1879 and 1912).

The following photographs from the work of Dunston show neither furrows nor kerbstones: Church Square and Church Street West - 1889 (p 29), Church Street West - 1902 (p 167), Market Street - 1894 (p 217), Pretorius Street

1891 (p 247), 1892 (p 252) and 1906 (p 259) and Andries Street - 1902 (p 269).On some other photographs kerbstones and sidewalks are visible, but no water inlets appear in the kerbstones. This indicates that at these places there were no covered furrows; i.e. the south-eastern corner of Church Square - 1911 (p 63), Market Street - 1889 (p 66), 1893 (p 202), 1899 (p 206), 1905 (p 209) and 1911-1912 (p 210), Church Street West - 1895 to 1900 (p 175) and 1903 (p 173) and Pretorius Street 1906 to1913 (p 231). An undated photograph from the National Archives depot (NAB, 20 773), shows Church Street West with a water inlet in the sidewalk and a fire hydrant. This proves that water pipes had already been installed, but since the photograph was not dated nothing more can be deduced from this.

These photographs prove that open ground furrows could be found in some places in Pretoria as late as 1911, and that the development of the water furrow system in Pretoria did not follow the same chronology in all areas. Therefore a more specific look was taken at the area under investigation, Church Street East. Various archival photographs of the site where the market building was erected, i.e. the south-eastern corner of Church and Van der Walt Streets showed no signs of a furrow, kerbstone or sidewalk (NAB, 1 156; 1 157; 1 158; 1 171 and 20 780). Only two of these photographs (NAB, 5 936 and 28 095) were dated, viz 1883 and 1901 respectively.

A photograph of the area under investigation (indicated as dating about 1888) shows a kerbstone with a water inlet on the southern side of Church Street. The sidewalk appears to have a gravel surface, and no manholes are visible (NAB, 12 111).

On two other photographs from 1888 a kerbstone is visible, but no water inlet or manholes are visible (NAB, 1 122 and 1 155). Also on photograph NAB, 12 104, which is undated, only a kerbstone along the street is shown. A photograph of Church Street East from the 1880s, does not show any furrow on the southern side of the road, while a photograph of the same area in 1892 shows a kerbstone but without any water inlet (Dunston 1975:116-117). This serves as clear proof that the furrow under discussion could only have been built after 1892, and that the date of photograph NAB,12 111, mentioned earlier, could not be 1888 but also had to be later than this.

A photograph dating from the period before 1889 and a photo from 1890, show an open furrow on the northern side of the street (Dunston 1975:73-74, 154-155). This feature is in line with the hypothesis that the furrows had to provide water for the block of erven lower down the incline, that is to its north (Fig. 3). Photographs from the period 1890-1894, show no signs of a furrow (Dunston 1975:74-75, 122). A photograph taken by Gros, dated 1889, shows no sign of a furrow on the southern side of Church Street East (Dunston 1975:132), another of the same area dated between 1889 and 1904, also shows no furrow or water inlet at this spot (Fig. 4) (Dunston 1975:134-135), and nor do the rest (Dunston 1975:124-127). A photograph dated 1894-1895 does show a sidewalk and kerbstone with a water inlet on the southern side of Church Street East (Fig. 5) (Dunston 1975:90-92). This demonstrates that a water furrow with a cover (roof) already existed at that time and that the date of Figure 4 is more probably between 1889 and 1892. Together with previous deductions this means that this furrow on the southern side of Church Street East must have been built between 1892 and 1894. It is shown on a photograph dating from 1903 (Dunston 1975:100-101).The market building was completed around 1891-1892 (Dunston 1975:144). It was built on the southern corner of Church and Van der Walt Streets, in other words, in the area under investigation. A poor quality photograph from 1892 of this area shows a kerbstone, but no water inlet (Fig. 6) (Dunston 1975:152-153). Since the sidewalk stretched over the furrow at about 1892 in the area being investigated, it may be assumed that the furrow was most probably built in 1892 - before the sidewalk and stoep (veranda) of the Market building extended over the furrow (Dunston 1975:135).

A photograph from1904 of Church Street East between Andries and Van der Walt Streets shows a shallow 'furrow' against the kerbstone of the sidewalk on the southern side of the street (Fig. 7) (Dunston 1975:140-141). This is a small furrow with the purpose of quickly taking away storm water to the water inlets against the kerbstone. From here the water flows to a furrow, or storm water ditch, under the sidewalk. The photograph proves that the furrow that was investigated was still in use in 1904, and that it was nothing more than a storm water ditch.

One of the best photographs, indicating the possible existence of the water furrow, is Gros's photograph no. 367 of the Market Square (Fig. 8). On this the well-defined sidewalk, as well as the kerbstone can be seen. A hole in the kerbstone is clearly an inlet for water (Van Schalkwyk *et al.* 1994:7). Unfortunately, the photograph is not dated precisely, but on the grounds of the above evidence it is clear that it was taken only after 1892.

On Gros's photograph no. 384 the sidewalk is visible in the vicinity of what is known today as Strijdom Square.This photograph must therefore also date from the period after 1892. It is therefore quite possible that the water furrow that was investigated could have been under this sidewalk. The same deduction may be made from other photographs in the National Archives depot. Photograph 20 772, dating from 1906-1910, for example, also shows signs of inspection holes (manholes) in the sidewalk (Fig. 9).The quality is such that no definite conclusions could be made from it. Photographs show that should the water furrow have been under the sidewalk, it would eventually have been covered by the stoep of the old market building that was erected around 1879 (Peacock 1955:91), creating the impression that the furrow had already been built before 1879 (Van Schalkwyk *et al.* 1994:7). Because it is now believed that the furrow was probably built in 1892, and definitely not before this date, this argument will not hold firm.

Eventually the water furrows in Pretoria were replaced by a system of pipes (Van Schalkwyk *et al.* 1994:7). R.T. Hall, a civil engineer, proposed as early as December 1877

**Fig. 3. This photograph from 1890 shows an open water furrow on the northern side of Church Street East (Dunston 1975:154).**

**Fig. 4. This photograph, dated between 1889 and 1892, shows no furrow or water inlet in the sidewalk on the southern side of Church Street East (Dunston 1975:135).**

that water be laid on to the houses from a reservoir by means of pipelines (Peacock 1955:149). By 1890 water provided to Pretoria by means of water pipes with a diameter of twelve inches (Krige 1992:4). Maps dating from 1889, 1890 and 1892, already show pipelines in Pretoria (NAB, S1/3 and S2/102). In 1898 rainwater pipes with diameters of 8 inches and 12 inches were laid under the sidewalks to draining trenches (Peacock 1955:188), while pipelines are shown at various places (NAB, S1/114). However, some open furrows were still being used by 1906 in the old portion of Pretoria (Lochhead 1913:79).

In March 1889 the contract for laying water pipelines to and over erven was awarded to L.G. Forstman. Sufficient water had to be left for the town furrow, and fire hydrants had to be erected. By 1891 this work was completed, and the town was provided with water by means of water pipes

**Fig. 5. The southern side of Church Street East from 1894/5. A water inlet is clearly visible in the sidewalk on the left hand side. This is the street block just east of the area under investigation, *i.e.* between Andries and Van der Walt Streets (Dunston:1975:90).**

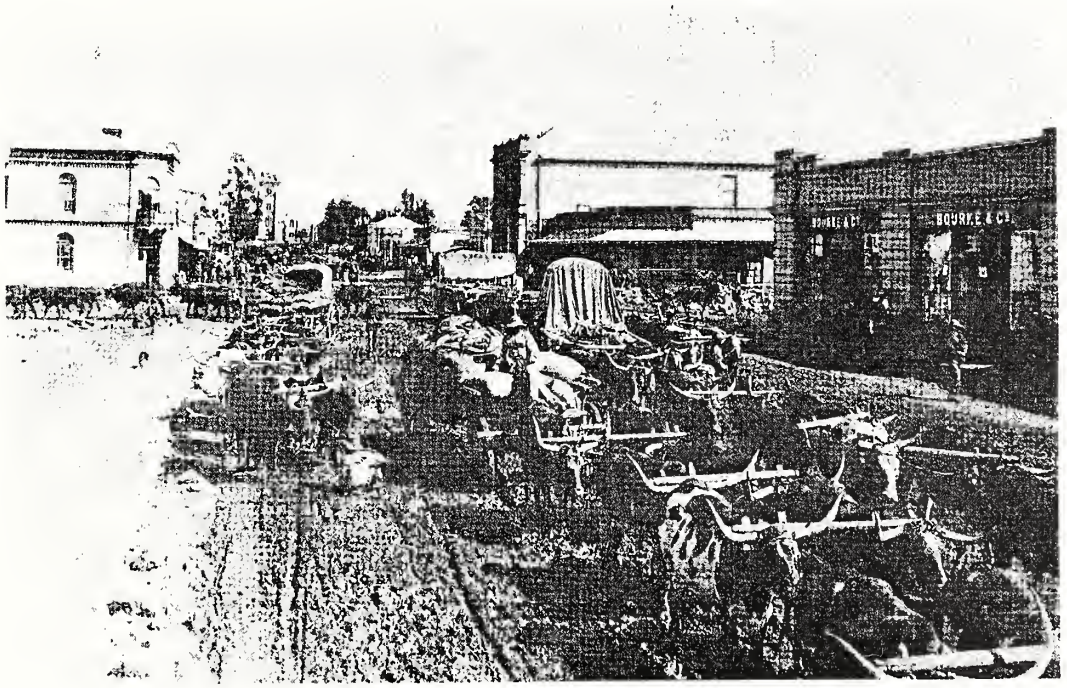


**Fig. 6. This photograph, of the area under investigation from1892, shows a kerbstone but without any water inlet (Dunston 1975:153).**

as well as furrows (Peacock 1995:238-241). A pamphlet, dated 1891, gives an explanation of the rules and regulations regarding the provision and use of water in Pretoria, which had to take place by means of water pipes (NAB, Pretoria Waterleiding Maatschappij Beperkt 1891). This document was also cited by Peacock. Photographs in the National Archives from the period 1900 to1910 show fire hydrants on the sidewalks. This confirms that water via a pipeline was then already available (Van Schalkwyk *et al.* 1994:7).

It is interesting to take note of one provision of the contract between the government and Fortsman's Pretoria Waterworks Syndicate. This provision stipulated that the company was responsible for repairing any damage to roads

**Fig. 7. A photograph of Church Street East in 1904. The function of the shallow furrow on the southern side (on the right) next to the kerbstone, was to drain storm water to inlets in the sidewalk. The photo indicates that the furrow under investigation was still used in 1904 and that it was a stormwater ditch (Dunston 1975:141).**

**Fig. 8. This photograph clearly shows a water inlet in the kerbstone (bottom left) at the investigated area (Gros n.d.:367).**

and streets as a result of water pipes being installed (Peacock 1955:239).This implies that it was no problem to remove something that was a nuisance, and to repair it again after the project had been completed. The possibility can therefore not be excluded that at a later stage (after 1892) the stoep of the market building did not really stand in the way of a furrow being built at that spot and that it might even date to after 1892.

In 1902 the municipality took over the task of providing a sanitary service from the company Sutherland & Kie. In 1903 it took over the task of supplying water to the residents of Pretoria from the Pretoria Waterleidingsmaat-

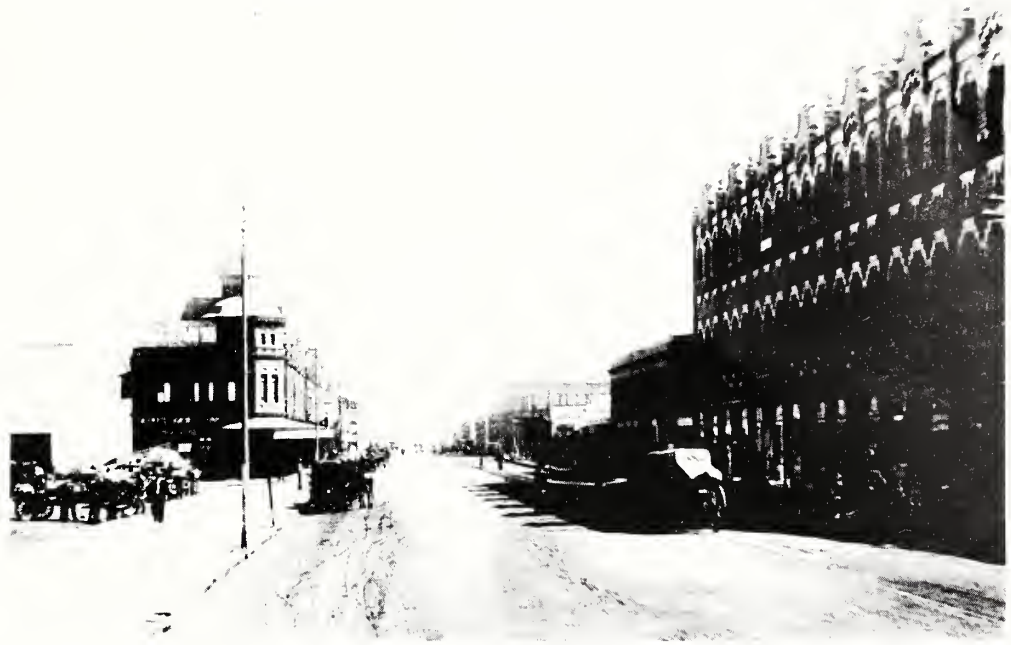

**Fig. 9. This photograph shows manholes in the sidewalk (left) at the investigated area. It dates from 1906-1910 and proves that the furrow was still in use during this time (NAB, 20 772).**

maatskappy. Between 1903 and 1913 the number of residents who made use of these services had increased to such an extent that the outdated and rusty mainlines had to be replaced. New mainlines were laid on in all directions. During this process 25 miles (40 km) of kerbstones and drainage furrows, 29 miles (46 km) of underground storm water canals and 11 miles (18 km) of street sewers were laid (Lochhead 1913:75-115).This serves as further indication that underground waterways were dug, even though sidewalks and other obstructions had to be removed first.

All documents of the ZAR's Department of Public Works in the National Archives have been checked.The only relevant information is a resolution taken by the Eerste Volksraad (Parliament) on 20 June 1893 that a water furrow had to be dug in Utrecht (NAB, PW 433). From this it is clear that water furrows were still dug in the ZAR in the 1890s.

An architectural drawing from 1893, by the state architect S. Wierda, shows plans for open and covered water furrows (Fig.10) (NAB, S2/109). This indicates that water furrows were still being planned in Pretoria during the early 1890s. However, for the purposes of this study the evidence about covered furrows is more important. The measurements of the covered furrow on the plan were more or less the same as that of the furrow under investigation (see Table1). This indicates that the excavated furrow was most probably built during the early 1890s. It is known further that open and covered drainage and water furrows were built in Pretoria in 1898 (NAB, ZAR 97:129; Peacock 1955:187).

The report of the city engineer indicates the following:

| | |
|---|---|
| Open drainage furrows (without mortar) | 30 350 feet |
| Open drainage furrows (with mortar) | 4 485 feet |
| Covered drainage furrows | 2 385 feet |
| Open water furrows | 2 464 feet |
| Covered water furrows | 1 184 feet (NAB, ZAR 97:129) |

During this year major repairs were also carried out to open and covered water furrows. Because the furrows also silted up at regular intervals, sludge pits were dug in 1898 to overcome this problem. The furrow under investigation was also filled with silt and had manholes at intervals of 6 metres. According to the report of the city engineer these pits had to be cleaned regularly (NAB, ZAR 97:123-124). This means that water furrows were still being built and used in a period when water pipes had already been laid on and that the furrow under investigation could have been built then.

In 1892 Arcadia and Muckleneuk were not allowed to lay on water pipes (Peacock 1955:241), which means that these portions of the city to the east of Church Square were still provided with water by means of a furrow. Arcadia and Sunnyside were only provided with an underground drainage system between 1906 and 1913 (Lochhead 1913:79), while a water pipeline was completed there by 1903 (Lochhead 1913:99). At the same time certain non-residential areas were provided with open ditches for this purpose. It is interesting to take note that these ditches were paved with flat stones (Lochhead 1913:81).

This corresponds with the furrow that was excavated, except that it was covered. Perhaps it was provided with a roof at a later stage, but its design and the building materials

**Table 1. Comparison between the measurements of the different furrows in Pretoria and the plans drawn by S Wierda (NAB, S2/109).**

| Furrow | Depth | Width | Thickness of walls | Thickness of roof | Thickness of floor |
|---|---|---|---|---|---|
| S. Wierda covered furrow(1893) | 3 feet (0,90m) | 2 feet (0,60m) | 10 inches (0,25m) | 4 inches (0,10m) | 4 inches (0,10m) |
| Church Street | 0,70-0,80m | 0,60m | 0,30-0,60m | 0,03-0,08m | 0,03-0,08m |
| Van der Walt Street | 0,20-0,25m | not visible | not visible | thicker than Church Street | not visible |
| Schoeman Street | 0,365m | 0,43m | not visible | 0,115m | destroyed |
| S Wierda open furrow (1893) | 2 feet (0,60m) | top: 4 feet(1,80m) bottom: 2 feet(0,60m) | not given on plan | n/a | n/a |
| Main ground furrow(1860) | 18 inches (0,45m) | 3 feet (0,92m) | n/a | n/a | n/a |
| Smaller ground furrows(1860) | 12 inches (0,30m) | 18 inches (0,45m) | n/a | n/a | n/a |

of the floor are simply just too similar to be a later addition. Water was pumped by means of pipelines to the forts which were built shortly before the Anglo Boer War, *ie.* the years 1896 to 1898 (Van Vollenhoven 1995:56-63).

This information comes from correspondence from the period that can be found in the National Archives depot (6 different document groups). Right after the war a 33-inch aqueduct was laid on from the Fountains Valley to Roberts Heights (later Voortrekkerhoogte - now Thaba Tshwane) (Krige 1992:4). Although no source reference is given by Krige, and no other source confirms this information, it can be assumed that water pipes were used from the 1890s.

It is therefore concluded that the furrow that was investigated was definitely built after 1879. The most acceptable date seems to be 1892, although 1898 is also a possibility since it is known that covered furrows were built in that year. Although new furrows were dug around 1906, this furrow was probably used for another few years. It is also clear that by 1912 or even 1910, it was no longer used.

## CONCLUSION

Information obtained from the archeological investigation alone could not explain the specific function and dating of the furrow. Therefore the historical information is invaluable.

The seemingly inexplicable difference in depth of the furrow, compared with the facts known about ordinary furrows, is because it was not one of the earliest ground furrows (around1860) in Pretoria. It also appeared to make no sense that the water furrow was situated on the southern side of Church Street, since this portion of Pretoria is sloping upwards to the south. A water furrow would have to have been on the northern side of the road to provide water for the block of erven to the north or down the slope (in other words between Church, Van der Walt, Vermeulen and Prinsloo Streets. Information obtained by Basson (1994:175) from ortophotographs supports the possibility that it was not an ordinary water furrow.

Previous suggestions that the purpose of the Church Street water furrow was to take away stormwater or run-off water and other waste from the market square (situated where Strijdom Square is situated today) to the Apies River is therefore correct.This explanation corresponds with historical information from the 1890s.The measurements of the furrow that was investigated agrees to a great extent with those appearing on an architectural plan from 1893.

The conclusion is that the furrow was only built by 1892 and possibly 1898, and that its purpose was to drain stormwater from the inner city towards the east (probably to the Apies River).

The furrow definitely does not date from the period before 1860, since work was still being carried out on them as late as 1863 (Pieterse 1942:28). Only ground furrows are documented between 1860 and 1880. Photographs suggest that the furrow was built in 1892. As it is known that covered furrows were built in 1898, there is also a possibility that the furrow could date from this year. It was probably not in use later than 1910, since it is known from historical information that water pipes and other drainage canals were generally in use shortly after the turn of the century. The cultural material uncovered from the furrow confirms this date. No object was found from a phase prior to the late 19th century. The appearance of recent artefacts in the archeological record can be explained on the grounds of later constructions.

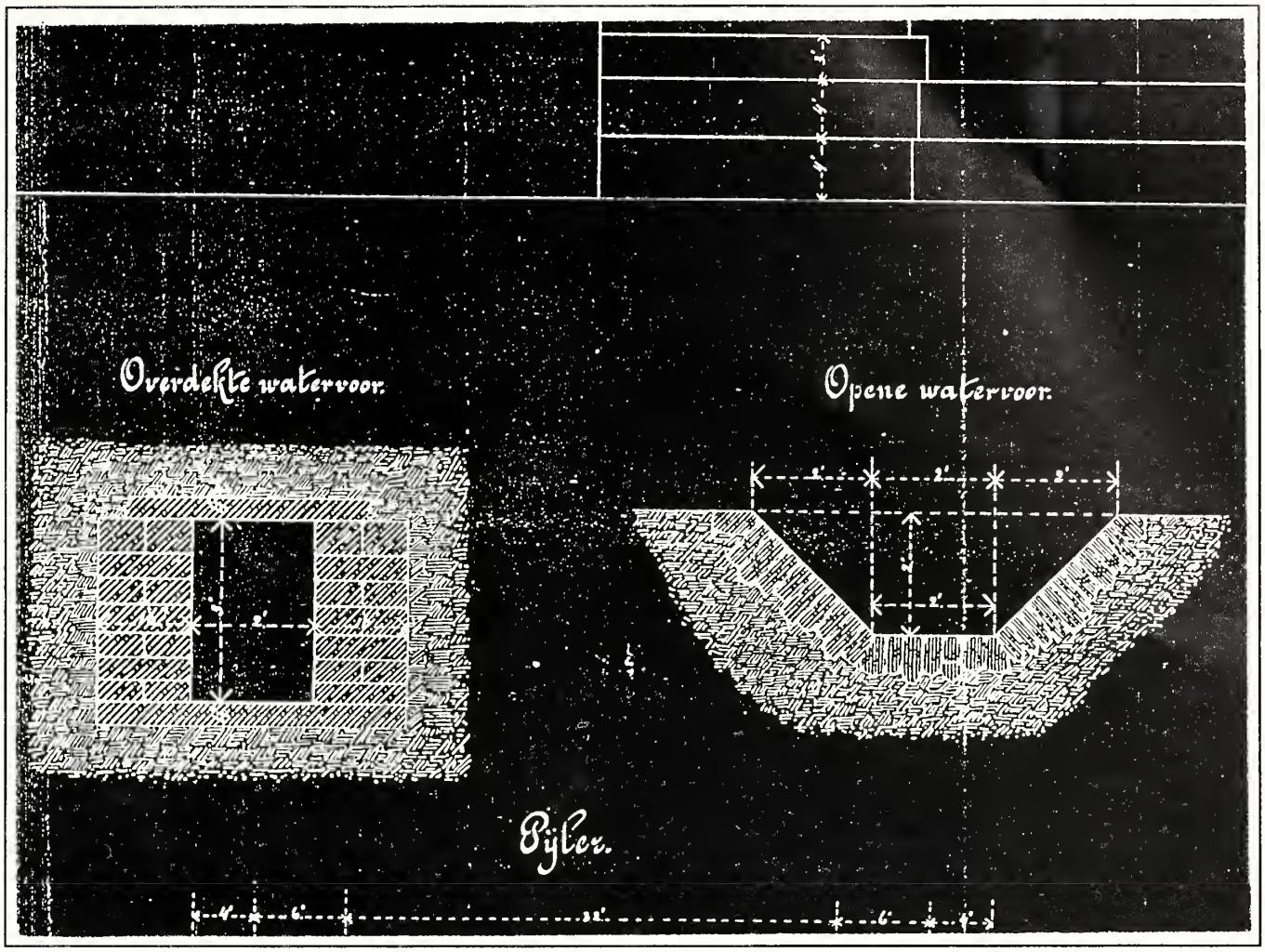


**Fig. 10. A drawing by the State Architect S Wierda from 1893: plans for open and covered water furrows in Pretoria (NAB, S2/109).**

Although there are still a few minor uncertainties about the Church Street water furrow, it represents a significant and authentic historical feature that survives in the modern city centre. Its preservation is therefore strongly recommended. The remainder of the furrow was sealed off under the pavement of the Church Street mall, so further archeological investigation is still possible. The discovery of another water furrow during 1998 confirms that other such remains may have survived. During construction work this furrow was unearthed on the southern side of Schoeman Street, between Prinsloo and Du Toit Streets, *i.e.* two street blocks south and one east of the one in Church Street ltprobably dates from the same period. The measurements of this furrow are also shown in Table 1. Basson (1994:175) mentions the possibility that water furrows could be found in Scheiding, Jacob Maré, Minnaar, Visagie, Struben, Bloed and Boom Streets, in other words all the streets running east-west. The investigation showed, however, that some of the streets running north-south also had water furrows. By investigating these furrows, whenever they are found, the network of water furrows can be reconstructed and an important part of Pretoria's history will not be lost.

The Museum recommended that a portion of the furrow be reconstructed and opened to the public, partly because of the important role played by water in the establishment and development of Pretoria (Van Schalkwyk *et al.* 1994: 23-25), but also because this would serve the purpose of popularising archaeology and educating the public in compliance with the goals of cultural heritage resources management.

## ACKNOWLEDGEMENTS

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# REVISITING NOMENCLATURE: 'EARLY IRON AGE', 'FIRST-MILLENNIUM AGRICULTURIST', OR WHAT?

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## ABSTRACT

As an art historian who has recently become fascinated by First-Millennium Agriculturist ceramics, I have come across several attempts at dealing with an issue of appropriate nomenclature for designating this era. Conceptual frameworks are articulated using words, yet an apparent discomfort with the term Early Iron Age has seemingly not led to a consistently used alternative. I have been wondering about this and, with respect, offer my thoughts on the matter in a hope that debate will be furthered. Hereunder I utilise aspects of the KwaZulu-Natal and Eastern Cape first millennium ceramic sequence to address some significances associated with such artefacts in interpretations of the past, and then discuss some ways in which ideas of particular social contexts are embedded in language. Thereafter introduction of the term Iron Age into South African archaeology is referred to with reference to past and current usage, and advantages/disadvantages of alternatives are suggested.

## INTRODUCTION

I feel that it is time to once again consider widespread use of the term Early Iron Age (EIA) in an African context. My concern is partly founded on factors that include, for instance, discussions between some young Border Technikon Art Theory students who have expressed a sense of discomfort with this label. Furthermore, in a contemporary multidisciplinary context that includes an ever-increasing audience of people not schooled in archaeology yet deeply interested by precolonial southern African artefacts and associated discourse, the term carries some problematic baggage.

Conversely, EIA is a valuable term because it is widely accepted, easy to use, and clearly distinguishes peoples and practices referred to from those whose lifestyles were largely based on pastoralist and/or hunter-forager economies. EIA is thus readily understood by archaeologists to refer to some African people (Fig. 1) who, during the first-millennium AD, practiced an economy based on agropastoral farming complimented by specific metal-working and clayworking technologies.

In the light of these observations it is appropriate that my consideration of potentially more suitable nomenclature is properly introduced with a brief look at some relevant ceramics - so as to foreground the medium/technology marginalised by the EIA label - and associated interpretations that have become assigned to their presence in the archaeological record. I have then proceeded to consider ways in which conceptual frameworks upon which some past researches have been based serve to position EIA (and by extension Late Iron Age) as troublesome terms. Thereafter, bearing in mind that in a sense all categories pose problems because they impose restrictions on the way we think about the world, some alternative terms are considered. This is, admittedly, a roundabout approach, yet my hope is to tell a story also geared for some of those who may not be well versed in such background, and thereby to emphasise that this matter of nomenclature does bear serious reconsideration.

## SOME RELEVANT CERAMICS, AND ASSOCIATED INTERPRETATIONS

From my point of view the ceramics of this era largely constitute an exciting visual and tactile feast of prehistoric artworks. Very briefly, and primarily as a severely limited overview focussed on continuity/disjunction of visual aspect through time, these ceramics include those known as having been present during the "Mzonjani phase ... from AD 420 to AD 550" (Whitelaw 1996:76) (Fig. 2); Msuluzi phase (Maggs 1980a) (Fig. 3); Ndondondwane phase (Maggs 1984a; Loubser 1993; Van Schalkwyk, *et al.* 1997) (Fig. 4); and Ntshekane phase (Maggs & Michael 1976) (Fig. 5).

The latter three phases in KwaZulu-Natal and Eastern Cape, spanning a time frame c. AD 650-1080 (Binneman 1996:30), are part of the Kalundu Tradition (Huffman 1989:76). Further north in Mpumalanga, the now quite well known, to art historians (Hall 1996; Maggs & Davison

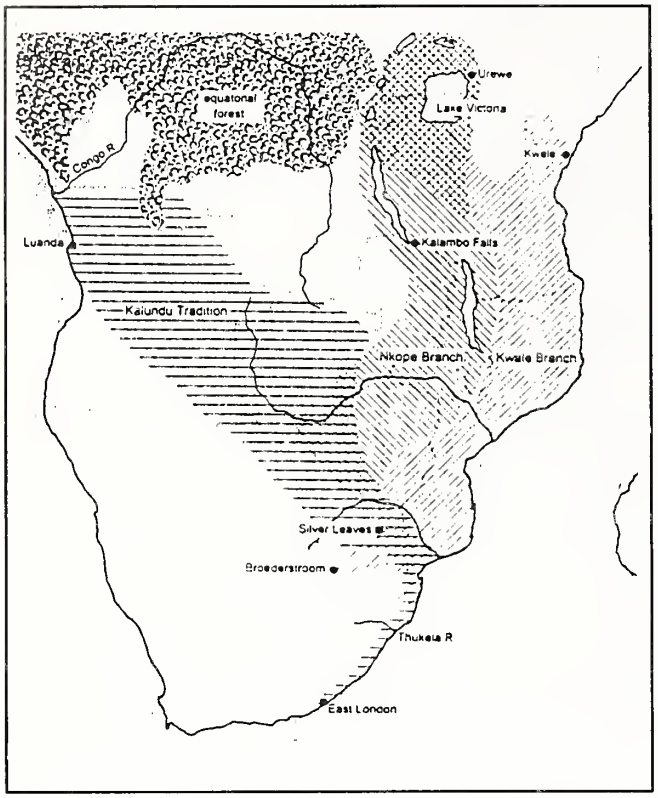


**Fig. 1. 1st Millennium Agriculturist traditions of eastern and southern Africa (Whitelaw 1997: 446).**

1981; Steele 2002:8) as well as archaeologists, Lydenburg Heads (Inskeep & Maggs 1975; c. AD 9th or 10th Century, Whitelaw 1996:82) (Fig. 6) are also part of this Tradition.

Ceramic artefacts of this era have acquired a central position whereby shifts in ceramic style (Huffman 1980) have been correlated, in conjunction with radiocarbon dating, to indicate a passage of time and people. Ceramics have also drawn attention to intimate domestic details associated with rhythms of daily doings and household utilityware usage.

Likewise, ceramics usage has suggested intermittent group activities, (such as at a time of making and using clay tuyère or small human figurines), and wider community activities (on occasions such as rites of passage at puberty and death). Different yet related significances associated with ceramics usage would also have arisen on occasions of intra-community activities such as at times of trade, or gift exchange. Furthermore, clay usage and hutfloor residues have drawn attention towards ways in which homestead and settlement layouts may have been influenced by world views in place at the time.

Prevailing cosmology would also have influenced those actions that led to intentional burial of ceramics, and also to acts that deliberately altered already fired ceramic vessels (Whitelaw 1994). Artefacts such as, for example, a vessel with a deliberately pierced base (Fig. 7), sculpted figurines and masks (Whitelaw 1993, 1994; Loubser 1993), and ceramics buried as grave goods may intimate ways of thinking wherein the past was honoured so as to secure the future (Murimbika 2000).

Such ways of thinking could have focussed on harnessing beneficial and appeasing detrimental energies conceptually linked with particular tangible objects in the environment (Murimbika 2000:8,9). Thus a seamless intermeshing of regular and irregular meaning-in-the- making events that arise "in the relationship between the object and the human subjects who invest it with meanings in particular contexts" (Davison 1996:135) are hinted at.

Meanings associated with first millennium AD ceramics have also been found to reside in a recognition that each ceramic vessel or fragment indicates a momentary culmination of technical and social knowledge, revealing the presence and intentionality of "skilled and knowing hands" (Dobres in press). This can be seen in chosen vessel shape, and in various engravings so consistently texturing vessel surfaces of the era. Furthermore, wiping striations left in the wake of long confident sweeping motions of fingers holding leaves or animal hide that applied finishing touches to a still damp clay surface (Fig. 8) hint even more intimately at deft manipulation of clay as medium in the deep past.

## SOME EXAMPLES OF EARLY 20th CENTURY THOUGHT THAT INFLUENCED NOMENCLATURE BEFORE USE OF 'IRON AGE' BECAME PREVALENT IN SOUTH AFRICA

Significantly, prehistoric ceramics have also acquired meaning as focal points allowing examination of conceptual concerns exhibited by writers of southern African prehistory. Gertrude Caton-Thompson, P.W. Laidler, and John Schofield's writings during the first half of the 20th Century, for example, show that choice of 'naming' words and other phraseology, when writing about prehistoric ceramics and their own experiences, inevitably revealed disparaging thought paradigms and opinions current at that time.

Their ways of thinking were strongly influenced by prevailing colonialist conceptions of Western European superiority over indigenous primitive/uncivilised peoples. From this conceptual viewpoint "African societies were simultaneously viewed as mirroring a 'paradisical prelapsarian' state of 'natural man', and representing an instance of extreme degeneration from the ideal of the Adamic prototype created in the likeness of God" (Dietrich 1993:iii).

Such a way of thinking is evident in Gertrude Caton-Thompson's (1971:19) rather peevish remark, made when writing of local workers employed to assist with excavation at Great Zimbabwe, that "on the whole ... their capacity to think for themselves was nil, and the natural gregariousness of uncivilised man was not conducive to ordered method".

Thus, her achievements of being the first to use aerial photographs of a southern African site, and of creating the first ceramic sequence for southern Africa (Hall, M. 1984a:485;1990:7), and in being the first to clearly attribute this sequence to African origins, are nonetheless couched in commentary that is currently widely regarded as problematic. She stated (1971:103), for instance, that the architecture of Great Zimbabwe struck her as "essentially the product of an infantile mind, a pre-logical mind", and

**Fig. 2. Two Mzonjani phase vessels on display at Natal Museum (Photo: John Steele, 2000, courtesy of Natal Museum).**

she found a "retrogressive continuity of custom down the ages".

It seems harsh to put Caton-Thompson's writings under this spotlight, but the point needs to be clearly made that despite excellence in many fields of activity, "settler paradigm" (Garlake 1982, cited by Hall, M. 1984b:263) nomenclature and ways of thinking inevitably haunt her writings because she was a person of her times. In this regard it is nonetheless essential to mention that her observations retained a remarkably even keel, and she (1971:7) was scrupulous in referring to the site as having been of "indigenous workmanship".

Caton-Thompson thus did excellent archaeological work based on her own observations rather than on opinion, and resisted trends of her era by publicly and firmly proclaiming Great Zimbabwe as being of African origin and medieval in date. She (1971:10) also demonstrated a discomfort in generic use of the term "Bantu", suggesting that usage of such a non-specific 'naming' word invited "reproach". Bemoaning the lack of alternatives, she commented that "until anthropologists provide a substitute", its usage "seems inevitable".

In contrast to Caton-Thompson's carefulness, P.W. Laidler (Medical Officer of Health, East London), writing about southern African coastal ceramics, paid scant regard to such niceties. His amateur interest is evident in attention to mainly surface finds, in a lack of focus and clarity throughout his prodigious writings, and in a baldly stated settler paradigm way of thinking and seeing.

He (1929:758) wrote, for instance, that "the race of men responsible for their deposit (ceramics) is usually termed 'Strandlooper' ... bastardisation appears to have taken place steadily, and the Hottentot was probably more and more Bush in blood further south and east that he migrated". His patriarchal colonialist conceptual approach is thus evident, for instance, in his attribution of ceramic remains to men (lack of gender awareness), in his stated concern with race, and in his focus on which peoples migrated where and miscegenated with whom to form which racial categories.

Furthermore, Laidler (1929:759) wrote frequently of "traditions" without being specific, made sweeping statements about origins, and was excessively judgmental in his reference to "late degenerate pots", using this phrase in such a way as to also ascribe a degenerate character to the peoples responsible for the making of those pots. He maintained that "shape was dictated to a considerable extent by the development or degeneration of technique. As the Hottentot trekked along the African coast his technique ... degenerated as he became bastardised, and there was a consequent loss of standard".

His (1935:560) seamless use of the term "degenerate" for peoples, as in "Bantu of mid 19th Century; Degenerate Pottery; Hottentot ...", and pottery (Fig. 9) derogatorily equated people with things. Laidler's conceptual framework epitomises colonial arrogance, emphasising such dualities as superior / inferior; good / bad; and civilised/primitive in his attempted classification of some prehistoric southern African ceramics.

Of Laidler's approximate contemporaries, architect and amateur archaeologist John Schofield was more focussed, and created a relatively consistent and systematic classification of certain ceramic styles. His 1935 and 1936 reviews of KwaZulu-Natal coastal ceramics feature some of the earliest methodical records, amongst other contributions, of what are now known as Kalundu Tradition ceramics, and led to a general synthesis of this type in Primitive Pottery (1948:152, 153).

Unlike the writings of Laidler, Schofield's 1948

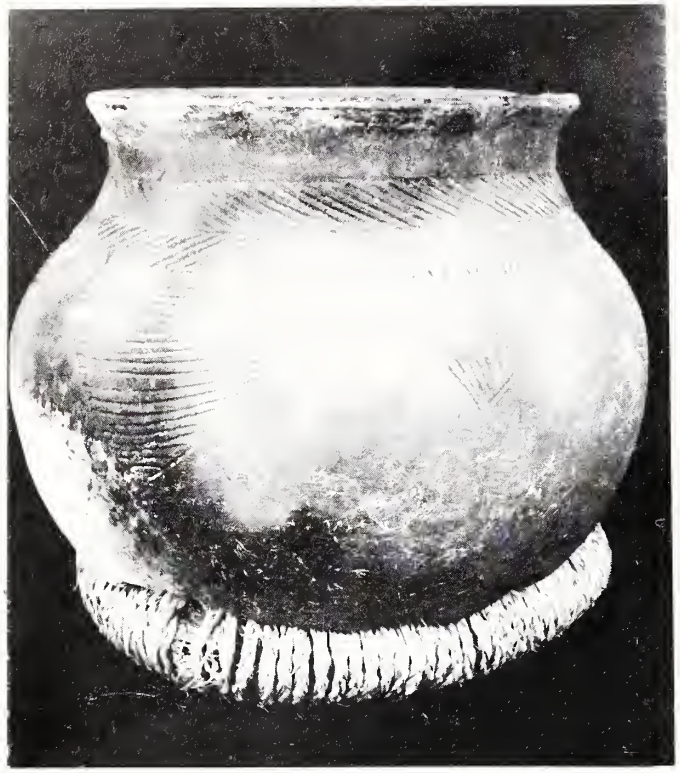

**Fig. 3. Msuluzi style vessel from KwaGandaganda (Whitelaw 1994). Note the pendant motif on the body of the vessel, deep engravings, everted neck, and globular shape. Height 240mm; diameter at lip 180mm; diameter at belly 270mm; thickness at lip 8mm; thickness at belly 11mm (Photo: John Steele, 2000, courtesy of Natal Museum).**

**Fig. 4: Ndondondwane style slightly everted neck of a vessel from KwaGandaganda (Whitelaw 1994). Height of neck 120mm; diameter at lip 185mm; diameter at belly 240mm; thickness at lip 5mm; thickness at shoulder 6mm. Matchstick = 40mm (Photo: John Steele, 2000, courtesy of Natal Museum).**

assessments were widely referred to by subsequent investigators into prehistoric material culture and, according to Tim Maggs (1993:70), "was to remain the basic reference work until the 1970's ... [but] was, however, of limited [archaeological] value because it was based on small, often surface, collections and it was written before the discovery of radiocarbon dating". Concurring with this view, Van Schalkwyk (1991:11) has observed that "Schofield's classification remained the archaeological standard in the region until its re-appraisal by Maggs"(see Maggs 1976, 1980a, b & c).

Schofield's title "Primitive Pottery", for his 1948 publication, sums up in one phrase the extensive influence that prevailing dichotomous civilised/primitive ways of conceptualising indigenous material culture and peoples had on some of his thinking. This thought paradigm is also evidenced in statements such as "primitive pottery making (as might be expected from its association with primitive agriculture) is carried on by women, and is always shaped by the hand; while that of more advanced peoples is made by men with the aid of the potter's wheel" (1948:15).

Despite such comments reflecting his era, Schofield (1948:25) did make an important contribution towards modifying the settler paradigm way of thinking in his admonition that "we must always regard primitive people as being just as much human beings as ourselves". The significance of this observation, as paternalistic as it may have been, becomes evident when it is compared with earlier statements made at the turn of the century.

Writers such as G.W. Stow (1905:233) had conceptualised central African peoples as "a seething mass of equatorial life", thereby presenting an image of people undifferentiated from animal and plant life, and G.M. Theal (1907:2-3) had maintained that "arrowheads, spearheads, scrapers ... (found along the South African coast) were the products of the skill of man in the lowest stage of existence". Furthermore, S.P. Impey (1926:88) had explained his opinion regarding the origin of southern African rock art by asserting that "I have always been unable to believe that people of such a low degraded type of humanity could have painted the pictures attributed to them".

These latter three writers throw the settler paradigm way of thinking into stark reality. Schofield's alternative suggestion of finding significance in commonalities shared by humanity, backed up by systematic research, would have influenced a gradual trend towards nomenclature that indicated a more careful consideration of all players involved.

## 'IRON AGE' NOMENCLATURE INTRODUCED INTO SOUTHERN AFRICAN DISCOURSE

The term Iron Age seems to have entered southern African discourse in 1933 when L.H. Wells wrote about an expedition to Cathkin Park, KwaZulu-Natal area (Maggs 1993:70). Wells (1933:183) noted that "it may be suggested in explanation of the rarity of finds of metal implements on

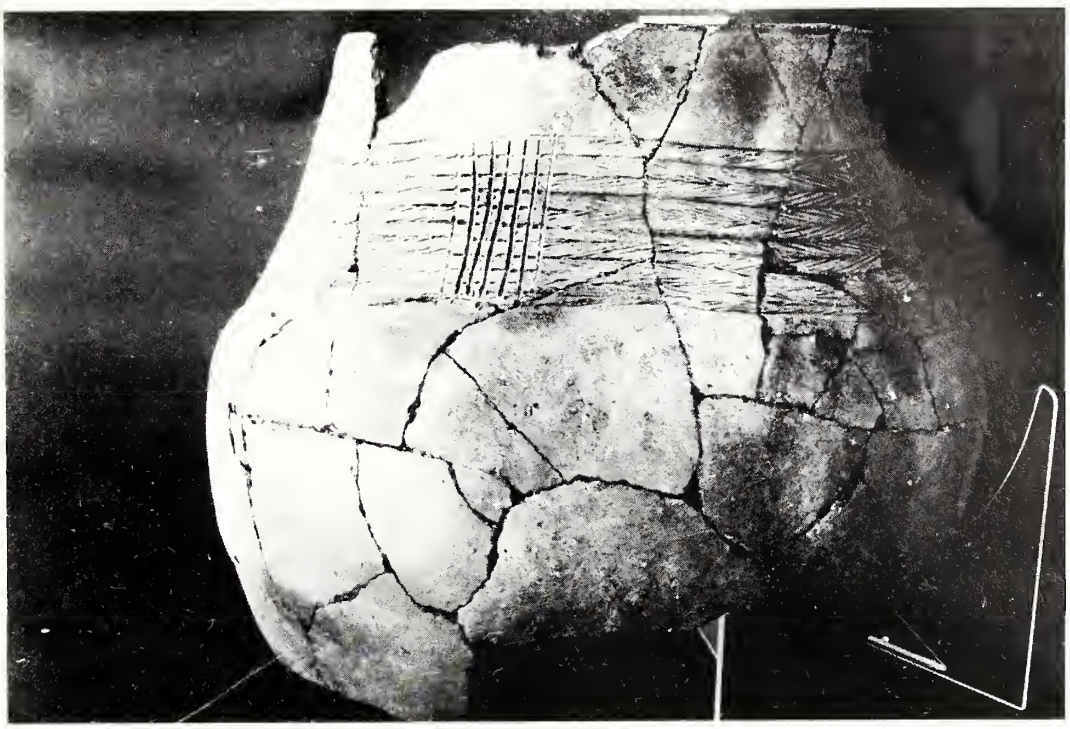

**Fig. 5: Ntshekane style vessel, and closeup of engravings: Height of vessel 300mm; diameter at belly 350mm; thickness at lip 6mm; thickness at belly 12mm. Matchstick = 40mm (Photo: John Steele, 2000, courtesy of Natal Museum).**

Iron Age sites that the metal was difficult to prepare, and that in consequence metal tools were used as long as possible and then melted down and re-worked".

Fifteen years later the term Iron Age was used by Schofield (1948:27) to designate one of his five categories of ceramics listed under the title "A classification and terminology for South African Primitive Pottery", and then in Part Four (*ibid*:71-162) ceramics of "The Iron Age" are discussed. Thus Schofield can be attributed as one of the first writers on early southern African ceramics to use the term extensively.

Then Mason (1952:70) attempted to formalise the idea of a local Iron Age. He suggested "the term 'South African Iron Age'... indicates the period subsequent to the introduction of iron-working, but prior to the appearance of European metal artefacts within the area defined". He went on to note that he did "not imply a rigid, chronological separation of the Stone and Iron Ages; the division between the two appears to vary and some sites ... suggest contemporaneity between the late Stone Age and Iron Age".

Thereafter the term found general acceptance. Van Schalkwyk (1991:4) has conceptualised the southern African Iron Age as "known to have extended over approximately the last two millennia. As a cultural term it designates groups of people who were iron producing and metal using mixed-farmers; who first colonised the Zambezi and Limpopo Basins, the East coast littoral, and the Eastern and north Eastern Plateau slopes (following Wellington 1955), between *c.* AD 250-900. These Early Iron Age (EIA) people are held to be directly ancestral to the Late Iron Age (LIA) Bantu speakers". Van Schalkwyk cited Hall, M. & Vogel 1980; Huffman 1970, 1979, 1982; Maggs 1977, 1980b, 1984a & b; and Phillipson 1977, 1985 as having contributed to this view.

## IS IRON AGE STILL AN APPROPRIATE TERM FOR USE IN CONTEMPORARY SOUTHERN AFRICAN RESEARCH?

A decade ago Maggs (1992:131) suggested that "Iron Age is not really a suitable or desirable term". Reasons given for this observation include that Iron Age "tends to relegate these communities to an impersonal and subjective status in history". This is a very valid concern, but it seems to me that archaeological investigative trends in southern Africa towards avoiding the impersonal in favour of squarely and diligently recognising the presence of individuals in society are now clear and in place.

Maggs (1992:131) also expressed concern that the term Iron Age "seems ... technicist". Avoidance of a technicist term is difficult, however, because both farming and clay working, as examples of noteworthy alternative identifying characteristics, require technical knowledge and associated skill in execution.

To worry at unpacking what constitutes a technicist term is to miss the point that most labels are conceptual tools that relegate communities to a relatively impersonal status purely by necessity. This usually happens because focus is placed on some or other reasonably representative aspect of economy, behaviour and/or beliefs, rather than on myriads of individual characteristics.

Thus the issue is not so much of whether the term is

**Fig. 6. Lydenburg Head # 3 (Inskeep & Maggs 1975. Photo: Aubrey Byron for South African Museum).**

technicist or not, but whether it does justice in a contemporary context to a mental construct using words of our time. It is in this spirit of enquiry that the term Iron Age - and by extension EIA and LIA - will now be further examined.

Maggs has (1992:131) pointed out that Iron Age is inadequate because it ignored a "contemporary introduction of cultivation" which he suggested was "a revolution of greater social and economic significance even than metallurgy". In his justifiable focus on cultivation as an important yardstick Maggs has, however, chosen to ignore the immense impact of ceramics technology - and concomitant facilitation of easy to use wet methods of cooking - as an influence on lifestyle. This may, however, be accounted for by the fact that peoples with hunter-forager and/or pastoralist economies created ceramics (of a significantly different style) during the era under discussion, and neither were metalworkers or extensive cultivators of the soil.

Nonetheless, omission of reference to ceramics technology as having a potential influence on an alternative label for Iron Age is remarkable because clay, like metal, undergoes a "heat-mediated transformation" from "natural product" to "cultural product". Ceramic and metal products are also "linked through their fundamental nature of irreversibility" (MacLean 1998:173), and so it is surprising that iron working technology is so consistently valorised at the expense of the other.

Perhaps choice of Iron Age as a term was influenced by opinions about the relative importance of weaponry when compared with what may have been thought of as an insignificant technology associated with domestic matters? Thus, I wonder whether choice of the term Iron Age - and ongoing usage thereof - partly reflects a patriarchal bias towards valorisation of metalworking over clay working technology? Whatever its origin, such bias seems inappropriate, especially because issues of ceramic style and interpretations of lifeways derived from ceramics analysis constitute such a significant aspect of archaeological research.

Furthermore, Iron Age as a term is sometimes problematised both by the vast time frame encapsulated - from c. AD 350 to the beginning of the colonial period in South Africa - and usage that extends this time frame into the more recent past. These difficulties become evident, for example, in Van Schalkwyk's (1991:4) statement that the "Iron Age in southern Africa is now known to have extended over approximately the last two millennia". What bothers me is that, even if unintentionally, this statement implies a lumping together of deeply prehistoric lifeways with those of farmers in the "recent ethnographic past" (1991:4), a time frame that Lane (1998:198) refers to as "terminal Later Iron Age".

What bothers me is that even though usage of Iron Age phraseology is context bound, inadequate allowance is made for some recent communities encapsulated by this term who probably neither engaged in ceramics nor metalworking praxis. Furthermore, there are likely to have been some dramatically differing metaphysical interpretations of meaning in life between peoples separated in time by the passage of approximately two thousand years.

Such lack of specificity, despite acknowledgement of EIA and LIA subdivisions, suggests an overarching conceptual framework that reflects ideas of largely undifferentiated lifeways and metaphysical worldviews. This conceptual compression of peoples and events in such a way as to inadequately specify changes in lifeways is derogatory in that it implies a degree of static cultural timelessness (Nettleton & Klopper 1988:39).

Such a viewpoint fails to foreground intentionality and recognise change as stemming from deliberate responses to life experience. Such a failure to distinguish clearly between life ways of first-millennium AD, second millennium precolonial, and more recent peoples has also been described by a Xhosa speaking Art Theory student (pers. comm.. M-Afrika Mtiya, August 2000) in a seminar discussion session as being "insulting" of a rich and varied heritage.

Furthermore, a strong argument presented by Simon Hall (1992:12; *cited* by Maggs 1992:131) that the term 'Early Iron Age' is a "misnomer since it was imported from the European sequence with its Copper and Bronze Ages, and where it therefore has different connotations" raises another reason in favour of abandoning Iron Age usage. In short,

**Fig. 7. Deliberately pierced vessel from Nanda, Trench 4, Burial 2 pit (Whitelaw 1993). Height 235mm; diameter at lip and belly 195mm and 230mm respectively; thickness at lip and base 9mm and 14mm respectively. Diameter of hole in base 140mm (Photo: John Steele, 2000, courtesy of Natal Museum).**

this observation is a polite way of saying that the term is a leftover from colonialist dichotomous thought prevalent at the time when Iron Age gained currency as a term to conceptualise the life ways under discussion. There is also no doubt that the term is offensive to some people, and as such warrants discussion pending gradual replacement with a viable alternative.

This is not an easy undertaking, as can be seen from the fact that despite a recognised need for change, EIA/LIA shorthand for a myriad well understood concepts remains in use. Such usage can be seen, for instance, in recent titles such as Meyer 1997; Steyn & Nienaber 2000; Van Schalkwyk, J. 1998; Vogel 2000; and Whitelaw 1997. Furthermore, even when alternatives are found in a title, the phrase often appears later in the text when the writer has to explain clearly which communities and/or concepts are being specifically referred to. This circumstance can poignantly be seen in Maggs (2000:1) where, despite being in the forefront as a proponent for change in nomenclature, he also rather resignedly uses "Early Iron Age".

The matter of name changing is complicated by factors like personal preference, clear understanding of intended meaning, and - like vehicle or insurance house branding - the name is well established. Furthermore, EIA and LIA do refer to specific lifeways wherein both cultural change and continuities have been meticulously documented with extraordinary attention to detail, and the terms are generally used with respect rather than with disparaging intent.

## VIABLE ALTERNATIVES?

Despite such very real obstacles it is appropriate to consider whether viable alternatives can be found. Maggs (2000:1) hints at a workable label in his usage of "pioneer farming communities". Yet, it may have been the vagueness of this alternative that prompted him to shortly thereafter use EIA on only one occasion. "Pioneer" as a concept is also potentially problematic because by definition it refers to the first people only, and so to have pioneers extending over many centuries defeats clarity.

It certainly is difficult to find Africa-focussed, readily understood, easy to say, suitably specific, yet quite broadly encompassing alternative terms. It was particularly instructive to look at Huffman's (2000:14) handling of this problem. In the statement that, for instance, "Mapungubwe was the most important precolonial farming site in South Africa" LIA usage is avoided by specifying place and economy.

Another successful method of avoiding EIA usage can be achieved by means of being scrupulously date specific, as in Huffman's (2000:14) statement that the "Zimbabwe culture sequence can now be divided into three periods ...". Likewise, Huffman (2000:16) uses language and economy-specific terms as in "the first Bantu-speaking farmers ..." and facies/tradition specific nomenclature such as "Happy Rest facies of the Kalundu Tradition ..." to achieve similar ends. It should also be pointed out that "Early Iron Age" also appears more than once (*Ibid* 25, 27) towards the end of his article.

Other variants on possibilities for alternative nomenclature were looked at as long ago as 1986 when Martin Hall explored possibilities of using the phrase "agropastoral societies". Subsequently Maggs (1992: 131) tried out using "farmer", and settled for "agriculturist" as more viable.

**Fig. 8. Detail of long sweeping motions of a handheld tool as it was manipulated during the shaping process on sherds from Nanda. Matchstick = 40mm. (Whitelaw 1993).**

Whitelaw and Moon (1996) have experimented with using "pioneer agriculturists", and Maggs (2000:1) has used the phrase "1st millennium AD".

A problem with 1st millennium as designator can be said to reside in the fact that it is time-restricted and thus does not cater for some first millennium sequences that continue unbroken into the second millennium. This difficulty is evidenced by turn of the millennium societies such as, for example, K2 and Mapungubwe, but can be avoided by being date or site specific. First-millennium usage is, however also potentially problematised by objections that may be raised about the sense of using a period-specific term to refer to peoples of a particular economic category.

In order to try and clear up at least some of my own confusion I then made further enquiries: In correspondence with Whitelaw (25/4/2000 & 5/5/2000) it was noted that use of "pioneer agriculturist" could be ambiguous and lead to confusion, especially considering that those farmers at the end of the 1st millennium were, as noted earlier, hardly pioneers compared to those five or six hundred years before. As an alternative he suggested "1st Millennium Agriculturist" as a replacement for EIA. He did, however, comment that even this phrase was problematic because in the more northerly regions of southern Africa "the EIA sequence persists to around 1300 - Eiland ceramics, and in Botswana to 1400 at Broadhurst". Such reservations, as discussed earlier, can be dealt with by being site and date specific.

Thus, "1st Millennium Agriculturist" could be suitable. This phrase also allows for extrapolation to "Precolonial 2nd Millennium Agriculturist" and "Early Colonial Era" for LIA. Furthermore, by being time-specific it does implicitly recognise that some African people were farming and making pots/metalworking before the specified time frame.

Despite feeling better about these terms I was still dubious because these phrases are usable but do not take into account metal and clay working technologies, are quite a mouthful, and also implicitly recognise BC/AD designators for dating, a procedure not universally accepted as is evidenced by trends towards BP phraseology.

Hall (Hall, M. pers. comm.2/10/2000) then helped clarify my thinking by confirming his preference for the accuracy of "agropastoral" over Iron Age. He, however, complained that agropastoral is an "ugly word", and suggested "first-millennium farmers" for EIA as a simple alternative. So, considering these options I returned to the objection raised by Maggs (1992:131) to "farmer", and found that I was still in agreement with his difficulty in using this simpler word. Nonetheless, Hall's use of "first millennium" concurred with both Maggs (2000:1) and Whitelaw in accepting BC/AD usage, at least for the purpose of finding a workable label.

In conclusion, realising that there are likely to be other alternative terms that I am unfamiliar with, a few general comments are in order: Terms that use "Early" or "Late" without making allowance for pre-first millennium sequences, or which do not take into account the important distinction in many peoples minds regarding pre and colonial era life ways, are potentially problematic. Likewise, it is worth considering that the word "late" is used extensively in the Eastern Cape to refer to someone who is dead - not an ideal connotation, although also not entirely inaccurate.

Furthermore, even though I have complained about the marginalisation of ceramics praxis, I have clarified that it is an unlikely candidate for naming word unless a phrase such

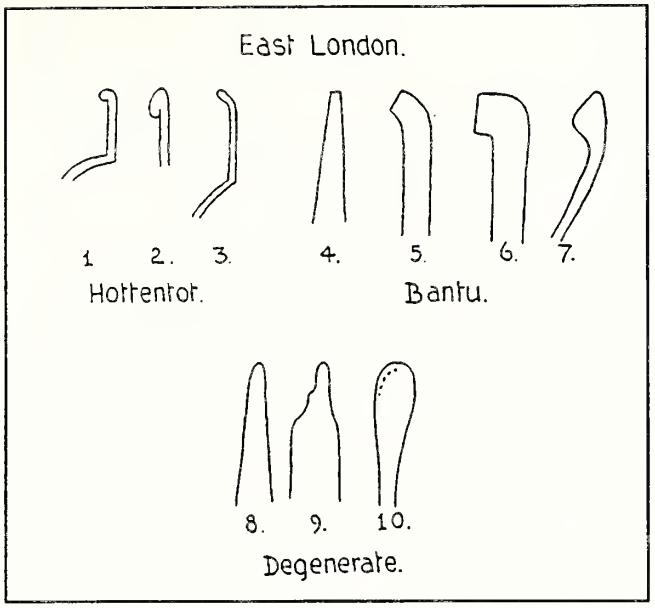


**Fig. 9: Laidler's classification of East London area ceramic types per rim profile (Graphic by Le Helloco of Messina, in Laidler 1936: 140).**

as "usually characterised by deep, boldly executed engravings" is used, and that is far too cumbersome. It is also worth remembering that I have not raised a serious argument against the use of "iron", but must confirm objections against the word "age" because of different connotations arising from European sequences and colonial mind sets.

Thus "1st Millennium Agriculturist" may be regarded as a potentially useful point of departure for further debate because it seems to be appropriate for Africa, is economy specific, and creates a usable acronym in FMA. 1st Millennium Agriculturist, although rather a mouthful, can be extrapolated to "Precolonial 2nd Millennium Agriculturist", as well as "Early Colonial Era Agriculturist" for the sake of clarity.

## ACKNOWLEDGEMENTS

I am immensely grateful to Johan Binneman, Martin Hall, Tim Maggs, and Gavin Whitelaw for variously replying to my many queries on this and other topics with care and encouragement. My thanks also to an anonymous referee who constructively pointed out anomalies. I do, nonetheless, take full responsibility for any oddities that remain. Furthermore, the financial assistance of the National Research Foundation, Border Technikon, and UNISA are hereby acknowledged. Opinions expressed are my own.

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# EXCAVATIONS AT /HEI-/KHOMAS (VAALHOEK) IN THE RICHTERSVELD, NORTHERN CAPE

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## ABSTRACT

Archaeological research was initiated in the Richtersveld Rural Area in 1990 with the view to determining prehistoric land use. Excavations in three areas around large boulders in the Vaalhoek valley suggest episodic occupation between 1980 BP and 330 BP. The introduction of ceramics and sheep during this period do not seem to have impacted significantly on other items of material culture with the possible exception of an increase in the size of ostrich eggshell beads. Sheep remain an insignificant portion of the faunal assemblage (4%) but there is an interesting inverse relationship between klipspringer and dassie, with dassie remains becoming more numerous through time.

Vaalhoek is compared with sites in the Northern Cape and in Namibia, which date within the last 2000 years. While manifestly different from Jakkalsberg and Bloeddrift (on the Orange River), the site resembles Bethelsklip in central Namaqualand and Rosh Pinah in southern Namibia. Two possible interpretations are offered for the occupation of the site.

## INTRODUCTION

Research into prehistoric land use in the Richtersveld was initiated in 1990 with excavations at /hei-/khomas or Vaalhoek. Negotiations into the establishment of the Richtersveld National Park, in the northern part of the Rural Area (Fig. 1), broke down in 1989 when many of the local stock farmers opposed the formation of the Park because their rights to grazing in the Park had not been recognised (Boonzaier 1991). Much discussion centred on the utilisation of the resources in the area designated for the Park and it was proposed that archaeological research could provide a time depth for pastoralist land use. A number of sites were excavated, including Die Toon or Kokerboom-kloof (Webley *et al.*1993), Tatasberg and Vaalhoek (/hei-/khomas).

The latter site was previously (Webley 1992) referred to as /Ai tomas on the basis of information from an informant. However, Nama-speakers in the Richtersveld indicated to me in 1997 that this spelling is incorrect and that it should be /hei-/khomas.

## SETTING

The western half of the Richtersveld is composed of sandy plains, sand dunes and rocky hills while the eastern section is extremely mountainous with the highest peaks reaching a height of 1378 m. The mean annual rainfall of 80 mm is extremely irregular and falls mainly in the winter months (May-September) although summer thunderstorms do occur. Coastal fog also provides additional moisture to plants in the wester section. The Richtersveld is situated in the Succulent Karoo biome and the western area includes Strandveld, Lowland and Upland Succulent Karoo.

The site (28 . 35 S; 17 . 05 E) is situated 50 km east of the Atlantic Ocean and about 15 km south-east of Kuboes, the largest of the four villages surrounding the Richtersveld National Park (Fig. 1). It comprises two large clusters of boulders some 100 m apart at one end of a valley situated next to the Ploegberge. The dense scatter of pottery and stone artefacts around one group of boulders led to the excavations around this site in January 1990. The second cluster of boulders is almost entirely hidden from view by an enormous tree, which provides shelter to shepherds during the summer months when the daily temperature can soar to 45°C. There is a permanent natural spring approximately 100 m to the west of this camping spot. While requiring regular maintenance, the spring did provide sufficient water to support a team of four researchers for two weeks during the hottest and driest time of the year. Contemporary herders make seasonal use of the locale around the boulders. When we arrived at the site a herder was living at a stockpost nearby while his shepherd was residing under the tree. The presence of an abandoned "kookskerm" (cooking shelter) and several old ash heaps testify to further recent occupation of the site (Webley 1982).

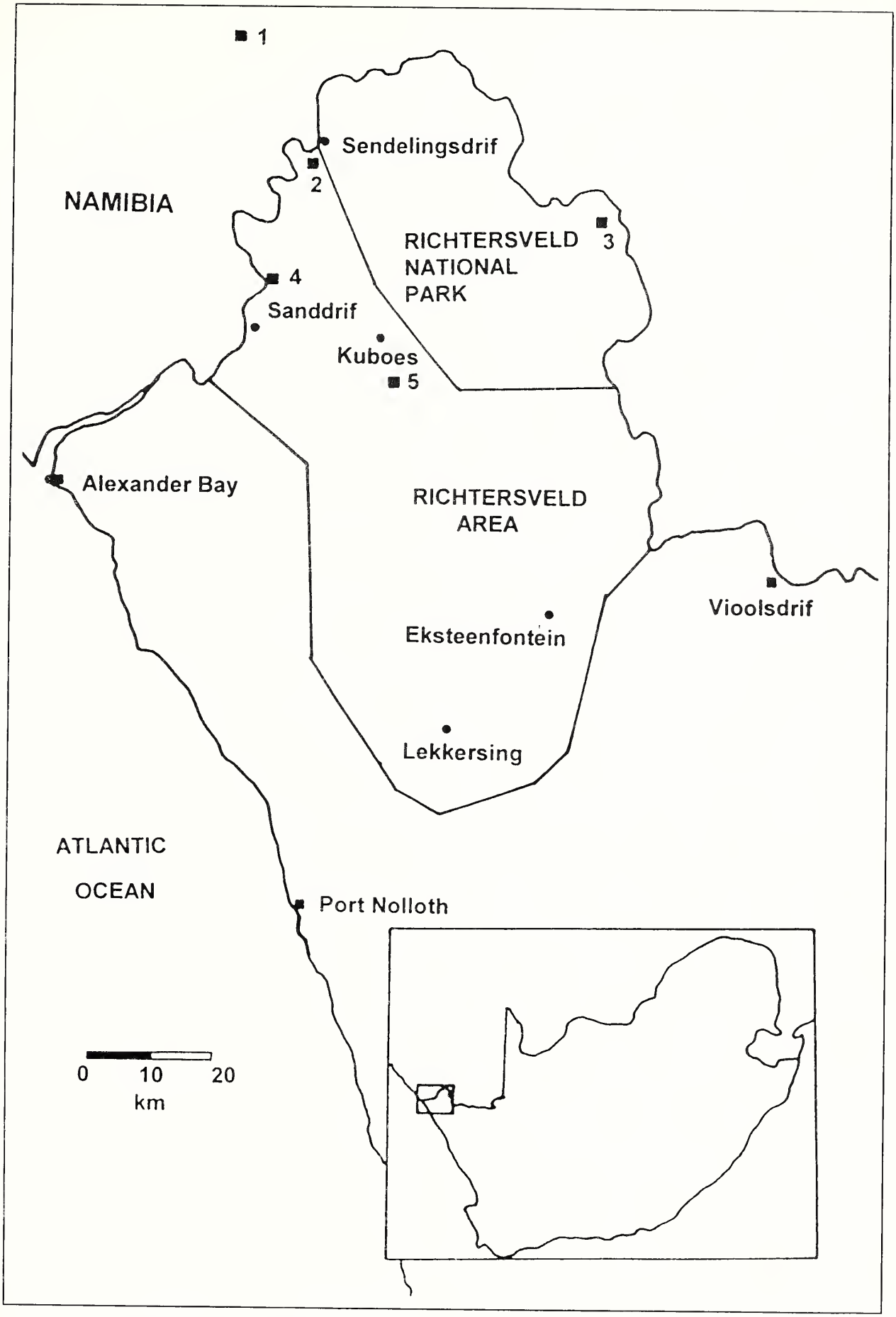


Fig. 1. The location the Richtersveld National Park in the Richtersveld Rural Area, Northern Cape. Site 1 = Rosh Pinah, Site 2 = Jakkalsberg A & B, Site 3 = Die Toon (Kokerboomkloof), Site 4 = Bloeddrift 23 and Site 5 = Vaalhoek (/hei-/khomas).

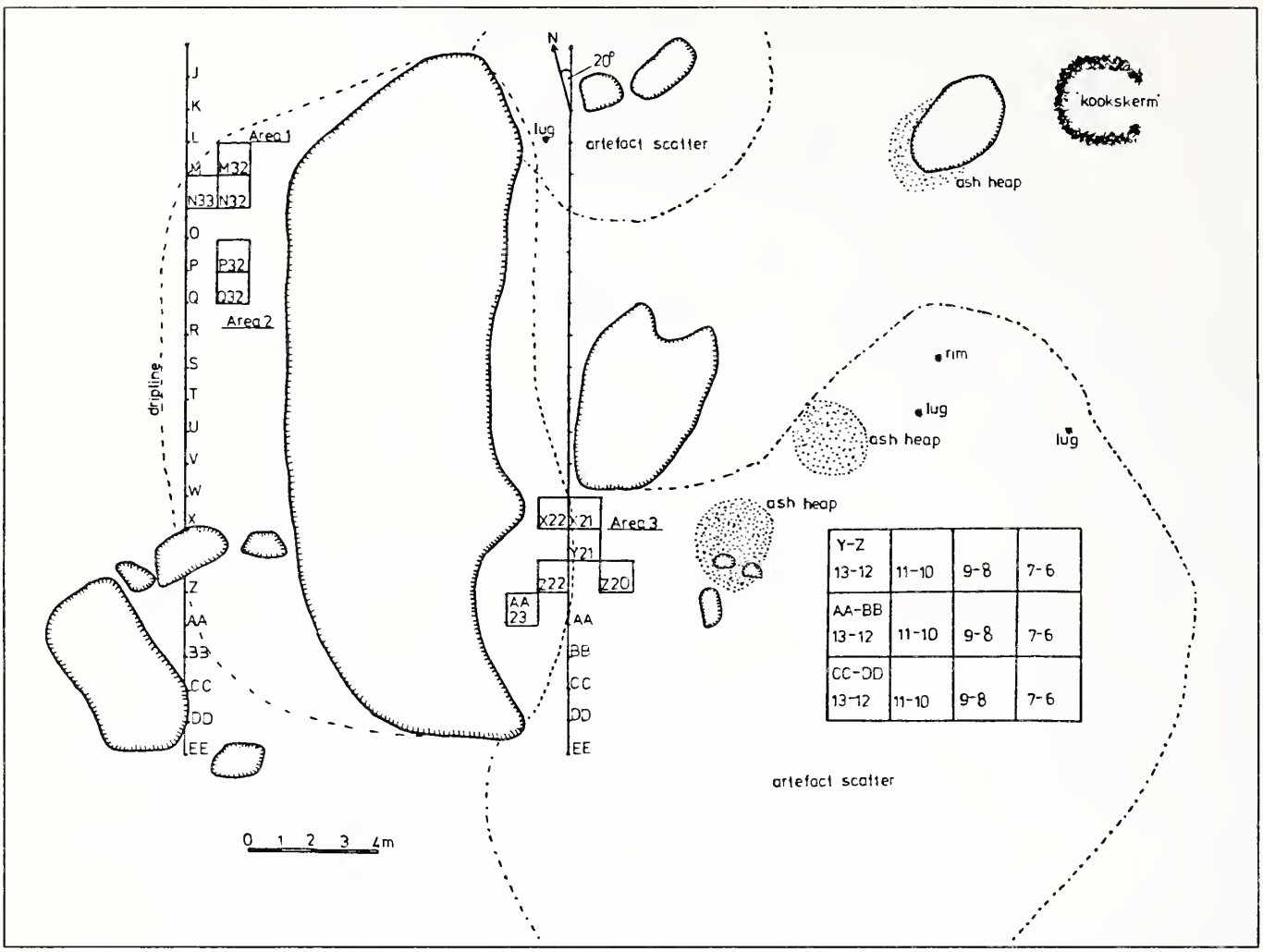


**Fig. 2. The site plan of Vaalhoek showing the location of the excavation in Areas 1, 2 and 3 and the surface collection made to the east of the boulders. Remnants of old stockposts are also visible on this site plan.**

The scatter of pottery and stone to the east of the boulders mentioned above, suggest that this was also a popular spot for settlement in the past. Further, to the west of the large tree and near the spring is a thick, crust-like deposit which appears to be dung. Potsherds are scattered here as well.

## EXCAVATION STRATEGY

The site was surveyed and a grid was set up over the artefact scatter to the east of the boulders. A surface collection was made of those areas indicated in Figure 2. Since each square measured two metres by two metres, material was collected from 32 square metres in total. The results of this surface collection are presented in Table 1 and are discussed below.

Excavations were started to the west of the boulders (Fig. 3), as it was erroneously believed that the size of the rock overhang on this side would provide welcome shelter from the summer heat. It soon became apparent however, that a combination of early morning shade and strong gusting winds made this a particularly cold and unpleasant spot. We excavated three square metres on this side of the boulder (Area 1). The deposit was not particularly rich and two further squares were excavated to the south-west (Area 2) merely to confirm that we were correct in shifting our attention to the east of the boulders. We were fortunate to recover well-preserved plant remains from these two squares as this provided a valuable time-depth to the ethnobotanical survey undertaken by Archer (1994). Plant remains also provide information on diet and season of occupation.

Our excavations then concentrated in a small shelter to the east of the boulder (Area 3). This side receives early morning sun but it does not get unbearably hot until 11 am when the small overhang provides shelter for the rest of the day. Six square metres were sampled in this area (Figs 4 & 5).

## SURFACE COLLECTION

Material was collected from the surface to the east of the boulders. The collection was undertaken in squares of 2 x 2 m, amounting to 32 square metres in total. The stone artefact numbers are disproportionately high for a single

**Table 1. Surface lithic collection from the east of the boulders.**

| | Y-Z 13 & 12 | Y-Z 11 & 10 | Y-Z 9 & 8 | AA-BB 13 & 12 | AA-BB 11 & 10 | AA-BB 9 & 8 | CC-DD 13 & 12 | CC-DD 11 & 10 | CC-DD 9 & 8 | CC-DD 7 & 6 |
|---|---|---|---|---|---|---|---|---|---|---|
| Chips | 166 | 421 | 92 | 678 | 443 | 63 | 296 | 601 | 721 | 160 |
| Chunks | 59 | 204 | 123 | 74 | 208 | 35 | 81 | 152 | 160 | 94 |
| Flakes | 165 | 524 | 339 | 224 | 453 | 148 | 284 | 357 | 413 | 216 |
| Cores | 105 | 183 | 138 | 82 | 175 | 62 | 148 | 108 | 163 | 93 |
| P. esq. | - | 2 | 2 | 1 | - | - | 1 | 5 | - | 2 |
| Specularite | - | - | - | 1 | 1 | 1 | - | 6 | 5 | - |
| q. crystal | - | 2 | 2 | 4 | 7 | - | - | 4 | 2 | - |
| Total Waste | 495 | 1336 | 696 | 1064 | 1287 | 309 | 810 | 1233 | 1465 | 565 |
| Utilised flakes | 14 | 18 | 20 | 7 | 19 | 1 | 31 | 15 | 13 | 41 |
| Grind. Pieces | - | 2 | 2 | - | 1 | - | - | - | - | - |
| Bored stone | - | - | 1 | - | - | - | - | - | - | - |
| Total Utilised | 14 | 20 | 23 | 7 | 20 | 1 | 31 | 15 | 13 | 41 |
| Scrapers | 4 | 9 | 4 | 5 | 5 | - | 3 | 10 | 13 | 4 |
| Backed pieces | 1 | 1 | 3 | - | 1 | - | - | 1 | 4 | 2 |
| Adzes | - | 2 | - | 1 | 2 | - | - | - | - | - |
| MRPs | 2 | 6 | 5 | 1 | 9 | 1 | 2 | 3 | 3 | 5 |
| Borer | - | 1 | - | - | - | - | 1 | - | - | - |
| Total formal | 7 | 19 | 12 | 7 | 17 | - | 6 | 14 | 20 | 11 |
| **Grand Total** | **516** | **1375** | **731** | **1078** | **1324** | **311** | **847** | **1262** | **1498** | **618** |

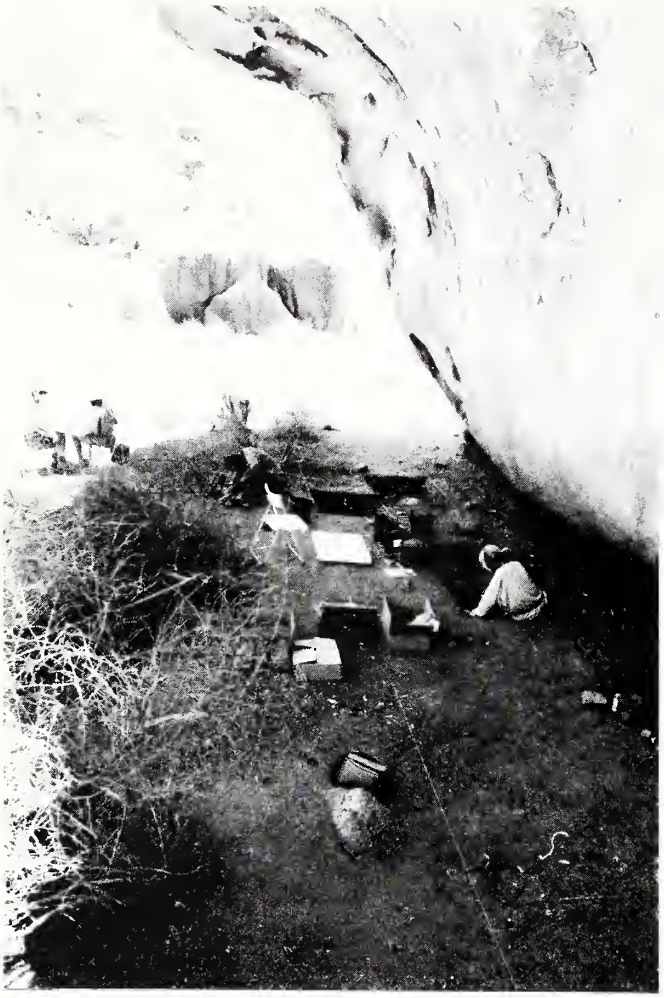

**Fig. 3. Areas 1 and 2 to the west side of the boulders.**

occupation and would seem to imply repeated occupation of this particular area in the past. Despite a lack of temporal control, the sample can nevertheless be indirectly dated by comparing the artefacts with those obtained from the chronological sequence established at the site. There are very few backed pieces in the surface formal tool assemblage but the large number of scrapers (Table 1) would appear to tie in with the middle units of the deposit in Area 3. The large sample of scrapers was measured and yielded a mean width/length ratio of 124, *i.e.* approaching a circular form. One unusual find was a broken bored stone as these are fairly uncommon in Namaqualand. The nine decorated potsherds found on the surface, all have oval impressions, and other diagnostic elements include three internally reinforced lugs. The potsherds all contain a grit temper and resemble the rest of the excavated samples in decoration and thickness. A few complete and unfinished ostrich eggshell beads were recovered, with external diameters ranging from 3,4 mm to 7,5 mm. A few fragments of specularite as well as marine shell fragments (mainly *Patella sp.*), were found in some areas. Although the area sampled is rather too small for spatial analysis, there does appear to be an inverse relationship between the distribution of scrapers and beads.

**Fig. 4. Area 3 to the east of the boulders.**

## STRATIGRAPHY

The stratigraphy of Areas 1 and 2 are better defined than in Area 3.

### Area 1

There are very few intrusive, modern items in the upper units of the deposit. The occasional glass fragment was recovered from the top 5 cm but there are no trade beads or other items, which would suggest early colonial contact. The stratigraphy of these three squares consisted of a number of layers of brown soil, ash and hearths. A charcoal sample from N33 BL produced a date of 420±50 BP. Square N33 contained a pit with the complete skeleton of an adult and foetal klipspringer. We stopped excavating in N33 at 32 cm when the soil became quite hard and sterile. Bedrock was reached in places in M32 at depths of between 20 cm and 28 cm. The lower layers of the deposit overlying bedrock contained a great deal of gravel.

### Area 2

The eastern half of squares Q32 and P32 contained a series of soft, gritty layers rich in organic remains and charcoal. Samples of both were collected and a radiocarbon date of 330±45 BP was obtained from P32 SLS2. The western half of these squares contained a number of compacted, fine ash layers. They appeared to be relatively sterile. The plant remains showed no signs of burning or charring suggesting that the ash was probably not in primary context but had been dumped there; *i.e.* it was possibly an ash heap of sorts. We stopped excavations in these squares when we reached a gritty, sterile horizon.

### Area 3

The overhang on this side of the boulder extends over 5 metres, providing both shade and shelter. Very few clear stratigraphic lenses or units could be identified in Area 3. Although the excavators remarked on changes in the texture of the soil (more gritty or more powdery) there were no visible changes in soil colour. The soil was predominantly of a light brown colour and fairly gritty. Hearths and pits,

**Fig. 5. Excavations in Area 3**

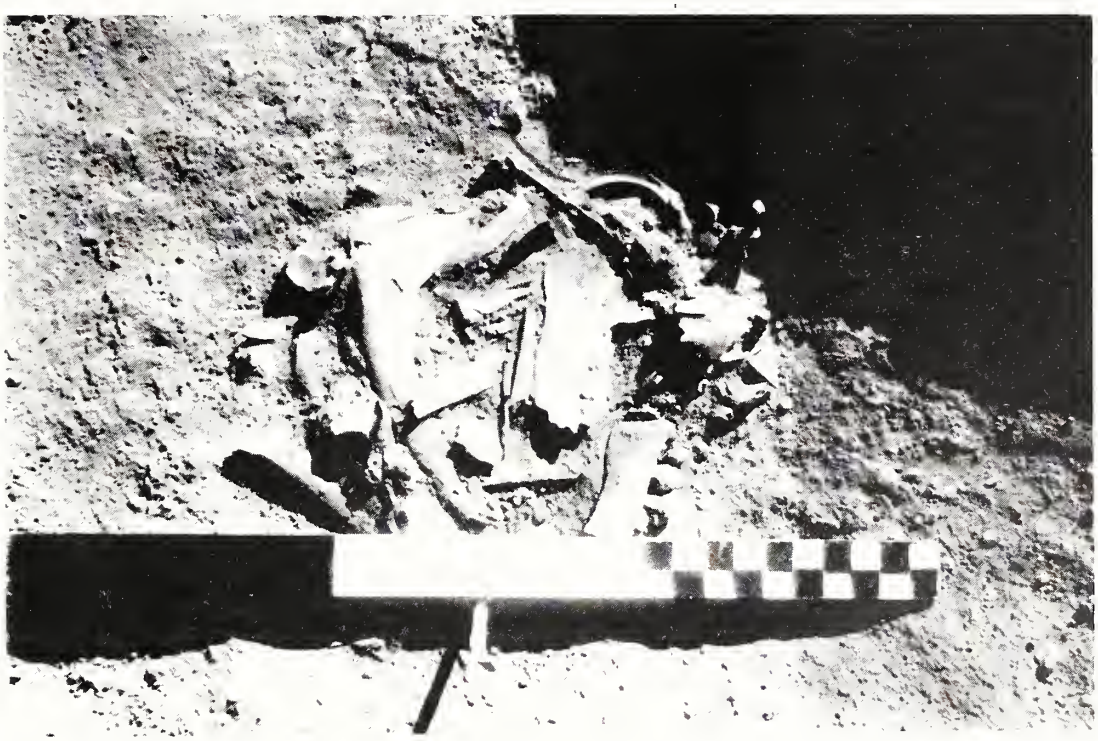

**Fig. 6. A pit in Area 3.**

however, were identified and excavated separately. Excavations in general proceeded in 5 cm spits to a depth of 30 cm. Charcoal from a hearth in Y21 Unit 2 at a depth of 7 cm below the surface produced a date of 106.1±0.6 which is recent.

Preservation of charcoal and organic remains on this side of the boulder is particularly poor and it was for this reason that the lower date from Area 3 had to be obtained on bone. A sample from Y21 LBS3 was dated to 1980±120 BP. Square Z20, which is most exposed to the elements, had root and termite disturbance. Excavations were stopped at Unit HAG 2 when the soil became very sterile. The soil toward the back wall of the shelter (as in square AA23) was considerably softer. Pits (Fig. 6) are a feature of the deposit,

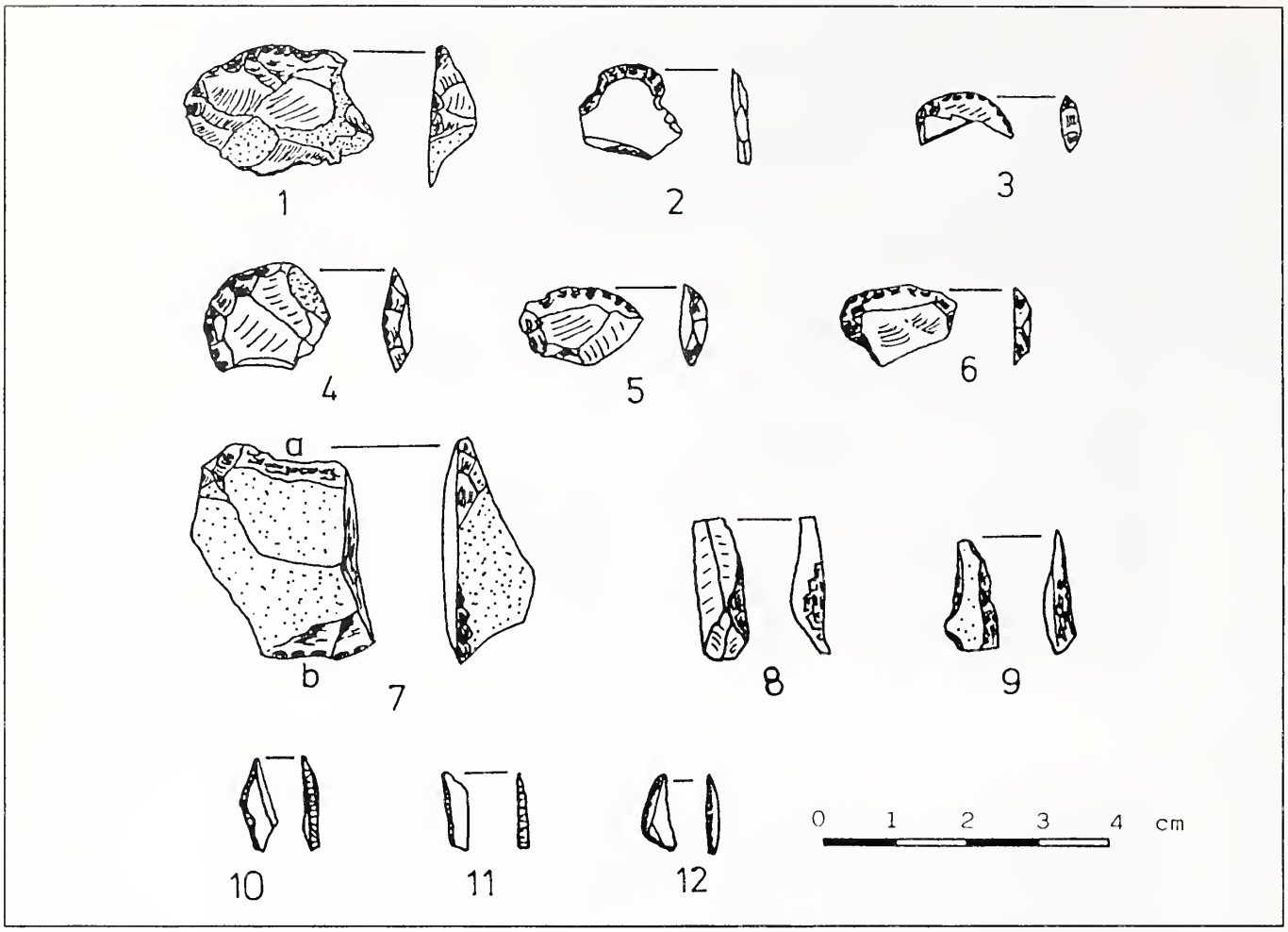


**Fig. 7. The stone artefacts from Area 1: 1 - silcrete scraper N33 S; 2 - chalcedony scraper N33 BL; 3 - broken silcrete scraper N33 GG; 4 - silcrete scraper N33 GG3; 5 - chalcedony scraper N33 GG3; 6 - silcrete scraper N33 RG2; 7 - chalcedony adze-scraper N33 GG (a is the adze end and b is the scraper end); 8 - silcrete adze N33 RG2; 9 - silcrete adze N33 RG; 10 - chalcedony backed bladelet N33 RG; 11 - chalcedony backed bladelet N33 BL; 12 - silcrete segment N33 GG2.**

at least five pits (all containing faunal and some with cultural material) were uncovered in Area 3. The pit in Y21 LBS4 was particularly rich in bone as well as containing an upper grindstone and a piece of ochre. There are no signs of rodent disturbance although some termite activity was observed in certain areas. Soil build-up may have been slow, the result of weathering of the granite boulders, wind action and human activity.

## DATING

All three areas around the rock were dated using radiocarbon methods.

1. A charcoal sample from N33 BL (Area 1) at 5 cm from the surface dated to 420±50 BP (Pta-5458) which may be calibrated to AD 429(1474)1643.

2. A charcoal sample from P32 SLS2 (Area 2) at a depth of 16 cm from the surface was dated to 330±45 BP (Pta-5452) which may be calibrated to AD 1474 (1640)1666.

3. The charcoal sample from 7 cm below the surface in Y21 unit 2 (Area 3) appears to have been contaminated as it produced a date of 106.1±0.6% (Pta-5444) calibrated to AD 1957/8. It is most unlikely that this unit, which contained stone artefacts and pottery, could date to the present period. There are no intrusive modern items in this unit suggesting hat the charcoal sample itself may have been contaminated.

4. In order to obtain a date for the lower units of Area 3, a charred bone sample was submitted from Y21 LBS3 from a depth of 18 cm. It produced at date of 1980±120 BP (Pta-5530) which calibrates to AD 328/334 or 207/353 which is a most probable calibrated date of AD 64 (Vogel pers. comm.). One distal sheep phalange was recovered from the same grid square and stratigraphic level as the date of 1980 BP and this bone was submitted by Sealy and Yates (1994) for accelerator radiocarbon dating. Unfortunately, the specimen contained insufficient protein for a date.

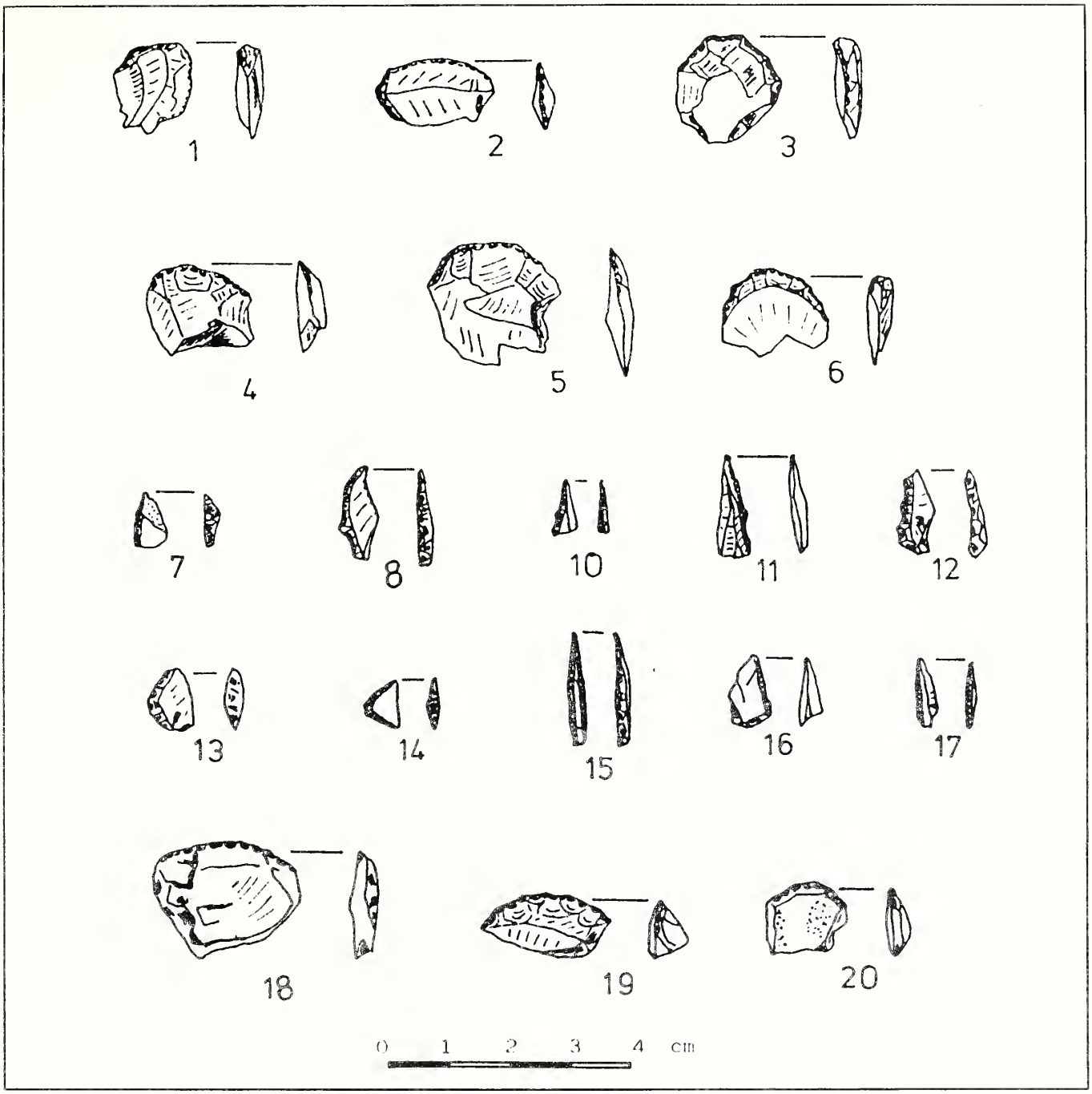


**Fig. 8. The stone artefacts from Area 3: 1 - silcrete scraper X22 S; 2 - chalcedony scraper X22 Unit 2; 3 - silcrete scraper X22 Unit 3; 4 - silcrete scraper X22 LBS; 5 - chalcedony scraper X22 LBS3; 6 - chalcedony segment/scraper X22 LBS4; 7 - quartz backed piece X22 Unit 2; 8 - quartz backed flake X22 Unit 3; 10 - quartz backed point X22 LBS; 11 - quartz backed bladelet X22 LBS2; 12 - quartz backed flake X22 LBS3; 13 - quartz segment X22 LBS3; 14 - quartz segment X22 LBS3; 15 - chalcedony borer X21 Unit 1; 16 - quartz backed bladelet X21 Unit 1; 17 - quartz backed bladelet X21 Unit 2; 18 - quartz scraper X21 Unit 2; 19 - chalcedony scraper X21 Unit 2; 20 - silcrete scraper X21 LBS4.**

At present, therefore, it would appear that the site was first occupied around the beginning of the first millennium and thereafter again between the 14th and 16th centuries.

## CULTURAL REMAINS

### Stone artefacts

The assemblages are of a microlithic nature and comprise a small formal tool component with scrapers, backed and miscellaneous retouch pieces (Figs 7 & 8) predominating. There are a few, non-standard adzes and their identification may be debated. The formal tool component varies between 1,3% and 2% in Area 1 (Table 2), is less than 1,5% in Area 2 (Table 3) and varies considerably between stratigraphic layers in Area 3, reaching 4% in some units (Table 4). There seems to be two peaks in formal tool distribution in the latter area, one during the period of most intensive occupation (around

**Table 2. Area 1 - Lithic artefact inventory.**

| | SUR | GBS | CCG | GGW | GRO | RO | RR | TOTAL |
|---|---|---|---|---|---|---|---|---|
| Chips | 219 | 213 | 165 | 212 | 245 | 259 | 86 | |
| Chunks | 28 | 59 | 36 | 35 | 41 | 37 | 24 | |
| Flakes | 102 | 147 | 114 | 143 | 156 | 177 | 69 | |
| Bladelets | 1 | | | 3 | 1 | | | |
| Cores | 66 | 65 | 42 | 32 | 51 | 39 | 21 | |
| P. esq. | 1 | 1 | | | 1 | | | |
| Specularite | | 5 | 2 | | 3 | 1 | | |
| Other | | | 1 | 3 | 3 | 2 | | |
| **Total** | **417 (96%)** | **490 (94%)** | **360 (94%)** | **428 (95%)** | **501 (95%)** | **515 (95%)** | **200 (92%)** | **2911** |
| Util. Flakes | 8 | 18 | 15 | 15 | 15 | 13 | 14 | |
| Grindstone | | | | | 1 | | 1 | |
| **Total** | **8 (1,8%)** | **18 (3%)** | **15 (4%)** | **15 (3%)** | **16 (3%)** | **13 (2%)** | **15 (6%)** | **100** |
| Scraper | 2 | 4 | 3 | 2 | 3 | 4 | 2 | |
| Adze | | | 1 | | | 1 | 1 | |
| Segment | | | | 1 | | | | |
| B. bladelet | | 1 | | | 1 | 1 | | |
| Backed point | | | | | 2 | | | |
| Backed flake | | 1 | | | | 1 | | |
| Borer | | | 1 | | | | | |
| M.R.P. | 7 | 4 | 3 | 3 | 2 | 3 | | |
| Backed basal segment | | | | 1 | | | | |
| **Total** | **9 (2%)** | **10 (2%)** | **8 (2%)** | **7 (2%)** | **8 (2%)** | **10 (2%)** | **3 (1%)** | **55** |
| **Grand Total** | **434** | **518** | **383** | **450** | **525** | **538** | **218** | **3066** |

Units 2 and 3, and in LBS) and another peak close to the base of the excavated deposit.

Scraper numbers remain constant through the sequence in all three Areas. Width/length ratios were calculated but because of the small sample sizes in each Area, the results should be applied with caution. Width/length ratios are an indication of scraper shape and at Vaalhoek they tend to be wide rather than square or long. Scrapers are manufactured on quartz, silcrete and chalcedonies.

Miscellaneous Retouch Pieces (MRP's) are second in frequency to scrapers and they are generally also made on silcretes or chalcedonies.

Backed Pieces was examined using Deacon's (1976) description for sub-types. Backed pieces showed a noticeable peak in the middle units of the deposit; i.e. in units 2, 3 and LBS. Segmented and unsegmented backed bladelets as well as backed points are generally made on quartz. Very few segments, borers and awls were recovered (Tables 2, 3 & 4). The low frequency of borers is significant in view of the widespread evidence for the manufacture of ostrich eggshell beads on site.

Adzes are generally quite small and they tend to conform to a rectangular plan. The flake scars are shallow and more closely resemble heavily utilized flakes. Microscopic examination of one such 'adze' showed wood polish on one side and hide polish on the other; apparently

**Table 3. Area 2 - Lithic artefact inventory.**

| | SUR | SBH | SLF | SLV | SL3 | TOTAL |
|---|---|---|---|---|---|---|
| Chips | 113 | 196 | 70 | 66 | 1 | |
| Chunks | 11 | 28 | 23 | 9 | 1 | |
| Flakes | 37 | 97 | 64 | 47 | 3 | |
| Cores | 21 | 52 | 23 | 18 | 1 | |
| Core rej. Flake | | 1 | | | | |
| Specularite | 1 | 2 | 1 | | | |
| Other | | | | 3 | | |
| **Total** | **183 (95%)** | **376 (95%)** | **181 (96%)** | **143 (98%)** | **6 (85%)** | **889** |
| Util. Flakes | 6 | 12 | 7 | 2 | 1 | |
| **Total** | **6 (3%)** | **12 (3%)** | **7 (3%)** | **2 (1,3%)** | **1 (14%)** | **28** |
| Scraper | | 1 | | | | |
| Backed point | 1 | 1 | | | | |
| Backed flake | | 1 | | | | |
| M.R.P. | 2 | 2 | 1 | 1 | | |
| **Total** | **3 (1%)** | **5 (1%)** | **1 (1%)** | **1 (0,6%)** | | **10** |
| **Grand Total** | **192** | **393** | **189** | **146** | **7** | **927** |

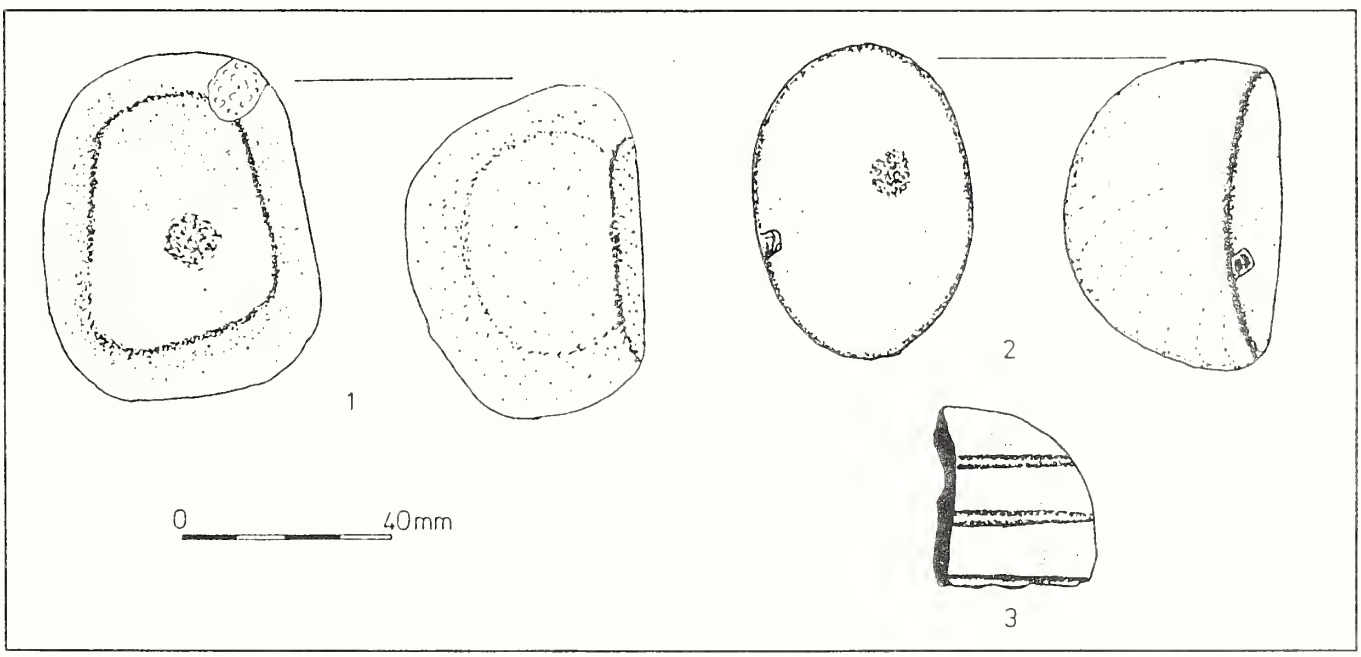


**Fig. 9. Ground stone artefacts: 1 & 2 - quartzite upper grindstones from Y 21 LBS4, both are ochre-stained. 3 - grooved, quartzite pebble from Y21 Unit 2.**

such 'scraper-adzes' are common in the Eastern Cape (J.N.F. Binneman pers. comm.).

Utilized flakes are the most common tool in the utilized category in all three areas. They are manufactured on quartz, silcrete or chalcedonies. Utilized flakes vary from 2- 6% in Area 1, to less than 3% in Area 2 and from 4-5%

**Table 4. Area 3 - Lithic artefact inventory.**

| | SUR | UNG | U2S | L3S | LHS | L4S | L4P | TOTAL |
|---|---|---|---|---|---|---|---|---|
| Chips | 95 | 438 | 1007 | 916 | 898 | 322 | 212 | |
| Chunks | 102 | 189 | 414 | 244 | 217 | 110 | 73 | |
| Flakes | 229 | 684 | 1329 | 923 | 930 | 568 | 291 | |
| Bladelets | 2 | | 6 | 24 | 9 | 1 | 5 | |
| Cores | 70 | 161 | 261 | 135 | 132 | 72 | 20 | |
| Red. Piece | 3 | 10 | | 5 | 7 | | 1 | |
| P. esquillees | 1 | | 8 | 7 | 5 | 1 | | |
| Ref. Flake | 1 | | | | | | | |
| Specularite | | 22 | 29 | 16 | 29 | 9 | 4 | |
| Other lithic | 2 | 4 | 14 | 13 | 19 | 8 | 6 | |
| //Khom | | | 1 | 4 | | 2 | | |
| **Total** | **505 (94%)** | **1509 (96%)** | **3069 (96%)** | **2287 (97%)** | **2246 (97%)** | **1093 (96%)** | **612 (98%)** | **11 321** |
| Util. Flakes | 21 | 22 | 48 | 29 | 29 | 16 | 1 | |
| Grindstones | | 3 | 4 | 1 | 1 | 2 | 2 | |
| Total | **21 (4%)** | **25 (2%)** | **52 ( 2%)** | **30 (1%)** | **30 (1%)** | **18 (1%)** | **3 (0,5%)** | **179** |
| Scraper | 4 | 6 | 10 | 9 | 2 | 11 | 4 | |
| Adze | 1 | | 3 | | 2 | | | |
| Segment | 1 | 2 | 3 | | | 1 | | |
| B. bladelet | | 2 | 6 | 4 | 4 | 3 | 1 | |
| B. point | | 2 | 3 | 3 | 1 | 4 | | |
| B. flake | 3 | 3 | 4 | 7 | 3 | 3 | | |
| Borer | | 2 | | 1 | 1 | | | |
| M.R.P. | 5 | 17 | 30 | 10 | 14 | 10 | 2 | |
| B. basal segment | | | 2 | | 1 | 1 | | |
| **Total** | **14 (3%)** | **34 (2%)** | **61 (2%)** | **34 (1%)** | **28 (1%)** | **33 (3%)** | **7 (1%)** | **211** |
| **Grand Total** | **540** | **1568** | **3182** | **2351** | **2304** | **1144** | **622** | **11 711** |

in Area 3.

Ground stone tools occurred in small numbers. A few smoothed, flaked granite cobbles as well as two quartzite upper grindstones with ochre staining (Fig. 9) and one broken, grooved stone (probably used in the manufacture of ostrich eggshell beads) were recovered from Area 3.

The waste category is composed of chips, chunks, flakes and cores. There are very few bladelets, core reduced pieces or piece esquillées. There is a general increase in artefact numbers in the middle of the sequence.

Stone Tools: Raw Material

The most significant aspect of the lithic toolkit is the wide range of raw materials encountered on site. Some of

**Table 5. Area 1 - Lithic artefact raw material.**

| | Quartz | Sil. | Chal. | Qzte | Granite | Spec. | Other | Total |
|---|---|---|---|---|---|---|---|---|
| **SUR** waste | 344 (82%) | 54 (13%) | 9 (2%) | 9 (2%) | 1 (0,2%) | | 1 (0,2%) | 417 |
| utilised | 1 (13%) | 3 (37%) | 4 (50%) | | | | | 8 |
| formal | 2 (22%) | 3 (33%) | 4 (44%) | | | | | 9 |
| **GBS** waste | 383 (78%) | 78 (16%) | 14 (3%) | 9 (2%) | | 5 (1%) | | 490 |
| utilised | 3 (16%) | 9 (50%) | 6 (33%) | | | | | 18 |
| formal | 5 (50%) | 1 (10%) | 4 (40%) | | | | | 10 |
| **CCG** waste | 261 (72%) | 75 (20%) | 16 (4%) | 5 (1%) | | 2 (0,5%) | 1 (0,2%) | 360 |
| utilised | 4 (27%) | 6 (40%) | 5 (33%) | | | | | 15 |
| formal | | 3 (37%) | 5 (63%) | | | | | 8 |
| **GGW** waste | 295 (69%) | 101 (23%) | 24 (6%) | 5 (1%) | 1(0,3%) | | 2 (0,5%) | 428 |
| utilised | 4 (27%) | 4 (27%) | 7 (46%) | | | | | 15 |
| formal | 2 (28%) | 1 (14%) | 4 (57%) | | | | | 7 |
| **GRO** waste | 318 (63%) | 131 (26%) | 40 (8%) | 6 (1%) | | 3 (0,5%) | 3 (0,5%) | 501 |
| utilised | 5 (31%) | 5 (31%) | 5 (31%) | | 1 (6%) | | | 16 |
| formal | 4 (50%) | 2 (25%) | 2 (25%) | | | | | 8 |
| **RO** waste | 316 (61%) | 148 (29%) | 43 (8%) | 4 (0,7%) | 1 (0,2%) | 1 (0,2%) | 2 (0,4%) | 515 |
| utilised | 4 (30%) | 5 (40%) | 4 (30%) | | | | | 13 |
| formal | 2 (20%) | 6 (60%) | 2 (20%) | | | | | 10 |
| **RR** waste | 121 (60%) | 65 (32%) | 10 (5%) | 3 (2%) | | | 1 (1%) | 200 |
| utilised | 5 (30%) | 4 (27%) | 5 (30%) | | | | 1 (6%) | 15 |
| formal | | 3 (100%) | | | | | 3 | 3 |
| **Total** | **2079** | **707** | **213** | **41** | **4** | **11** | **11** | **3066** |

these raw materials had clearly been collected elsewhere and brought to the site (D. Miller pers. comm.).

Quartz amounts to about 60 % of the total lithic assemblage in the lower units and increases to 80% in the upper units (Tables 5, 6 & 7). This is accompanied by decrease in the frequencies of silcrete and chalcedonies. Quartzite is generally present in small numbers (2%), while the peak in other raw materials (*i.e.* specularite, *etc.*) appears linked to similar peaks in pottery, shell, ostrich eggshell beads and decorated ostrich shell pieces. Specularite, haematite, shale, mica, slate, agate and quartz crystals occur in the middle units. The specularite pieces are small (less than one centimetre in size) and appear to have been ground down to this size.

Large pieces of sheet mica, obviously not the weathered from the parent granite at the site, were also recovered. Ground mica appears to have been incorporated as temper in some of the potsherds. There were also a few

**Table 6. Area 2 - Lithic artefact raw material.**

| | Quartz | Sil. | Chal. | Qzte | Granite | Spec. | Other | Total |
|---|---|---|---|---|---|---|---|---|
| **SUR** | 153 (83%) | 25 (14%) | 3 (1%) | 1 (0,5%) | | 1 (0,5%) | | 183 |
| waste | | | | | | | | |
| utilised | 1 (17%) | 1 (17%) | 4 (67%) | | | | | 6 |
| formal | 3 (100%) | | | | | | | 3 |
| **SBH** | 304 (81%) | 62 (16%) | 4 (1%) | 3 (0,8%) | | 2 (0,5%) | 1 (0,2%) | 376 |
| waste | | | | | | | | |
| utilised | 8 (66%) | 2 (17%) | 2 (17%) | | | | | 12 |
| formal | 3 (60%) | 2 (40%) | | | | | | 5 |
| **SLF** | 137 (76%) | 26 (14%) | 12 (7%) | 2 (1%) | | 1 (0,5%) | 3 (2%) | 181 |
| waste | | | | | | | | |
| utilised | 4 (57%) | 2 (28%) | 1 (14%) | | | | | 7 |
| formal | 1 (100%) | | | | | | | 1 |
| **SLV** | 117 (82%) | 11 (7%) | 10 (7%) | 4 (3%) | | | 1 (0,6%) | 143 |
| waste | | | | | | | | |
| utilised | 1 (50%) | | 1 (50%) | | | | | 2 |
| formal | 1 (100%) | | | | | | | 1 |
| **SL3** | 4 (67%) | 2 (33%) | | | | | | 6 |
| waste | | | | | | | | |
| utilised | 1 (100%) | | | | | | | 1 |
| formal | | | | | | | | 0 |
| **Total** | **738** | **133** | **37** | **10** | | **4** | **5** | **927** |

pieces of rounded sandstone which resembled //khom stones (Webley 1990). Unusual finds included a shale pencil or point and two quartz flakes from the surface unit and which were coated in an unknown red pigment.

**Pottery**

A total of 557 potsherds were recovered from eleven (11) square metres of excavation; 59 from Area 1, 75 from Area 2 and 423 from Area 3. There is a gradual increase in sherd numbers from the base of the excavation in Area 3, to the top; with a peak in Units 2, 3 and LBS and then a slight increase again close to the surface.

The pottery thickness ranges from 3 mm to 9 mm with a mean of around 5,4 mm (Table 8). Two lugs were recovered (Unit 3 and LBS) from the excavations and a further two from the surface collection. Decoration most commonly consists of circular or oval punctations and less commonly horizontal scoring below the rim. There is a single rim fragment with diagonal lines on the lip itself. Sherd sizes are very small and it is difficult to reconstruct vessel shape. The typology for lip types and orientations developed by Sadr for the Western Cape (Sadr & Sampson 1999) was applied to the excavated rim sherds (Table 9). Rim orientations are either vertical or flared and lip types are most commonly bevelled, rounded or flat. These fragmentary remains would appear to fit into Phase D of the four-part sequence developed by Sadr for Khoekhoen vessel types from the south-western Cape (Sadr & Sampson 1999). Pottery from the surface collection is illustrated in Figures 10 and 11.

The temper is gritty with a small number of sherds containing ground mica. Very few sherds show a red or orange burnish, the majority have a rough black exterior and interior finish. One sherd contained a conical, bored hole which may have been drilled to facilitate mending a crack. Rudner (1968) has described how fibre, sinew or copper clamps could be inserted through the holes and the cracks covered with resin or wax.

Ostrich eggshell pieces

Fragments of ostrich eggshell were recovered throughout the deposit although they too showed a peak in Units 2,

**Table 7. Area 3 - Lithic artefact raw material.**

| | Quartz | Sil. | Chal. | Qzte | Granite | Spec. | Other | Total |
|---|---|---|---|---|---|---|---|---|
| **SUR** waste | 362 (72%) | 94 (17%) | 29 (6%) | 15 (3%) | 2 (0,4%) | | 3 (0,5%) | 505 |
| utilised | 6 (28%) | 11 (52%) | 3 (14%) | | | | 1 (5%) | 21 |
| formal | 5 (36%) | 8 (57%) | 1 (7%) | | | | | 14 |
| **UNG** waste | 1042 (69%) | 312 (21%) | 84 (5%) | 39 (3%) | | 22 (1%) | 9 (0,5%) | 1509 |
| utilised | 5 (20%) | 12 (48%) | 5 (20%) | 2 (8%) | 1 (4%) | | | 25 |
| formal | 22 (65%) | 7 (21%) | 5 (14%) | | | | | 34 |
| **U2S** waste | 2072 (67%) | 667 (22%) | 214 (7%) | 65 (2%) | 4 (0,1%) | 29 (0,9%) | 18 (0,5%) | 3069 |
| utilised | 12 (23%) | 24 (46%) | 11 (22%) | 3 (5%) | 2 (3%) | | | 52 |
| formal | 24 (39%) | 23 (38%) | 14 (23%) | | | | | 61 |
| **L3S** waste | 1495 (65%) | 522 (23%) | 181 (8%) | 48 (2%) | | 16 (0,6%) | 25 (1%) | 2287 |
| utilised | 5 (16%) | 15 (50%) | 9 (30%) | 1 (3%) | | | | 30 |
| formal | 5 (15%) | 19 (56%) | 10 (29%) | | | | | 34 |
| **LHS** waste | 1405 (62%) | 527 (23%) | 222 (10%) | 41 (2%) | | 30 (1,3%) | 21 (0,9%) | 2246 |
| utilised | 9 (30%) | 12 (40%) | 8 (26%) | | 1 (3%) | | | 30 |
| formal | 11 (39%) | 15 (54%) | 2 (7%) | | | | | 28 |
| **L4S** waste | 716 (65%) | 228 (21%) | 99 (9%) | 28 (2%) | 2 (0,1%) | 9 (0,8%) | 11 (1%) | 1093 |
| utilised | 4 (22%) | 5 (28%) | 6 (33%) | 2 (11%) | 1 (5%) | | | 18 |
| formal | 16 (48%) | 11 (33%) | 6 (18%) | | | | | 33 |
| **L4P** waste | 403 (66%) | 133 (22%) | 61 10%) | 4 (0,6%) | | 4 (0,6%) | 7 (1,1%) | 612 |
| utilised | 1 (33%) | 2 (66%) | | | | | | 3 |
| formal | 2 (28%) | 3 (43%) | 2 (28%) | | | | | 7 |
| **Total** | **7 623** | **2 650** | **972** | **248** | **13** | **110** | **95** | **11 711** |

3 & LBS (Table 10). Some of the fragments showed evidence of burning. A small number of decorated ostrich eggshell fragments (presumably from flask mouths) was recovered from all three areas but was especially concentrated in Area 3 (Fig. 12 & Table 10).

Ostrich eggshell beads

The deposit was sieved through a 1 mm mesh to recover all the beads. The external diameter of complete as well as broken beads was measured (Table 9). In Area 3 there is evidence for a gradual increase in mean bead diameters through the sequence from 4,2 mm in the lower units to 5,4 mm in the upper units. Larger beads start appearing in those units with larger sheep/goat samples and a peak in pottery numbers. The date of 1980±120 BP is from a unit in Area 3 with no large beads (*i.e.* 7,5 mm in diameter). A single large bead was found in the unit immediately above it. This seems to indicate that large beads post-date the first appearance of pottery. Two ochre-stained beads were recovered from the lower units. Furthermore, two of the

**Table 8. Pottery numbers and sherd thickness.**

| | Numbers | Rims | Decoration | Lugs | Bases | Thickness (mm) |
|---|---|---|---|---|---|---|
| **Area 1** | | | | | | |
| Surface | 20 | | | | | 58 |
| GS/BL/SG | 24 | | 1 | | | 58 |
| CH/CH1/GG | 12 | 1 | | | | 52 |
| GG/GG2/WA | 3 | | | | | 63 |
| **Area 2** | | | | | | |
| Surface | 7 | 2 | 1 | | | 58 |
| SS/BP | 27 | 1 | 2 | | | 54 |
| SLS/FAS | 14 | 1 | | | | 55 |
| SLS2/VGS | 26 | 2 | | | | 54 |
| SLS3 | 1 | | | | | 67 |
| **Area 3** | | | | | | |
| Surface | 48 | 1 | 2 | | | 58 |
| Unit 1 | 67 | 3 | 3 | | | 58 |
| Unit 2 | 166 | 5 | 5 | 1 | | 55 |
| U3/LBS | 82 | 6 | | | 1 | 54 |
| LBS2/3 | 35 | 2 | | | 1 | 49 |
| LBS3/4 | 11 | 2 | | | | 50 |
| LBS4 | 1 | | | | | |

beads from the upper units were of a pronounced oval shape and appear to have been manufactured in this way as they do not show signs of wear. It is quite apparent from the number of unfinished beads recovered from all three Areas that bead manufacture took place on site (Table 9).

Marine shell

In view of the distance to the Atlantic Ocean (50 km) a surprisingly large number of marine shell fragments was recovered from the excavation. Six complete *Bullia* sp. shells and one complete *Conus* sp. were recovered. Four of these were from Area 2 in the organic units. One of the *Conus* sp. shells has an aperture and shows signs of having been strung, possibly from the hair, in a necklace or sewn onto clothes. A large number of *Patella granatina* and *Patella argenvillei* fragments were found in Area 3 (Table 11). The fragments are all very small and it is not clear what the shell was used for. While they may have been broken up to make decorative items, the only two broken pendants (Fig. 13) recovered from the deposit, were not made on *Patella* sp.

Bone artefacts

The sample was small, comprising a worked bone flake, five broken bone points, a broken bone pendant and a fragment of a tortoise carapace bowl (Fig. 13).

## SUBSISTENCE INFORMATION

Plant remains

One of the most significant, and unexpected, discoveries made at the site was a small sample of well-preserved plant remains from Area 2. The plant remains were recovered from very soft, sandy lenses which appeared to be inter-digitated with grey ash deposits. The plant remains showed no sign of fire damage and it is therefore possible that the ash may be in a secondary context, for example something like an ash heap. The presence of *Bullia* sp. shells, a large

**Table 9. Pottery - lip types and orientations (after Sadr & Sampson 1999).**

| | Lip Type | Orientation | Diameter of Vessel Mouth (mm) |
|---|---|---|---|
| **Area 2** | | | |
| Q32 SUR | Tapered | Vertical | 70-80 |
| Q32 SUR | Bevelled | Vertical | ? |
| P32 SS | Tapered | Flared | ? |
| Q32 SLS2 | Half-round | Vertical | ? |
| **Area 3** | | | |
| Y21 SUR | Bevelled | Flared | 70-80 |
| AA23 Unit 1 | Bevelled | Convergent | 70 |
| AA23 Unit 1 | Everted | Vertical | ? |
| Z22 Unit 1 | Bevelled | Vertical | 80 |
| X21 Unit 2 | Half-round | Flared | 60 |
| Z22 Unit 2 | Flat | Vertical | ? |
| AA23 Unit 2 | Flat | Flared | 35-40 |
| X22 LBS | Bevelled | Convergent | ? |
| X22 LBS | Round | ? | ? |
| Z22 Unit 3 | Bevelled | ? | ? |
| AA 23 Unit 3 | Round | Vertical | ? |
| AA 23 LBS3 | Round | Vertical | ? |

pottery sample and large ostrich eggshell beads would suggest that the deposit relates to a period of more intensive occupation of the site, but that this particular area may not have been a focus of human activity itself.

A preliminary analysis of the plant remains was undertaken with the assistance of Mrs E Brink (previously Curator of the Schonland Herbarium at the Albany Museum). The lack of an adequate comparative collection meant that we were only able to assign corm bases to the Iridaceae family. At least three, but possible more different types of corm bases could be distinguished. A small sample of *Diospyros* sp. (probably *austro-africanus*) seeds and *Rhus undulata* seeds were recovered. They are edible from October to December (F. Archer pers. comm.). A large number of grass stems, unfortunately unidentifiable, were also found. Two large seeds were recovered and are presently being subjected to microscopic examination.

According to Archer (1994), corms and bulbs are generally edible from the end of July to October although much depends on the occurrence of rain during that particular year. However, the plant remains certainly suggest that the site was occupied, for a period in its history, during the spring and early summer months.

Faunal remains

Faunal preservation in general was good although the remains were highly fragmented. This is a feature of faunal collections also observed at other central Namaqualand sites (*eg.* Bethelsklip and Wolfkraal) which was excavated by Webley (1992). The fauna was identified by J. Brink (National Museum in Bloemfontein) who noted that the bone from Area 1, 2 and 3 was not markedly different in species composition (Tables 12, 13 & 14). These areas have been presented separately here for purposes of comparison. Klipspringer (*Oreotragus oreotragus*) and dassie (*Procavia capensis*) dominate the assemblage with a small, but consistent, component of small grey mongoose (*Galerella pulverulenta*), red rock rabbit (*Pronolagus rupestris*) and sheep/goat (*Ovis/Capra).* At least two sheep/goat (*Ovis/Capra*) individuals (one juvenile and one adult) are represented in the remains recovered in Area 3 from Unit L4S, dated to 1980 BP. One fragment was a tooth, however, which could have moved down through the deposit. An attempt was made to obtain an accelerator radiocarbon date from the charred distal sheep phalange but unfortunately the specimen contained insufficient protein for a date (Sealy & Yates (1994). Sheep/goat remains

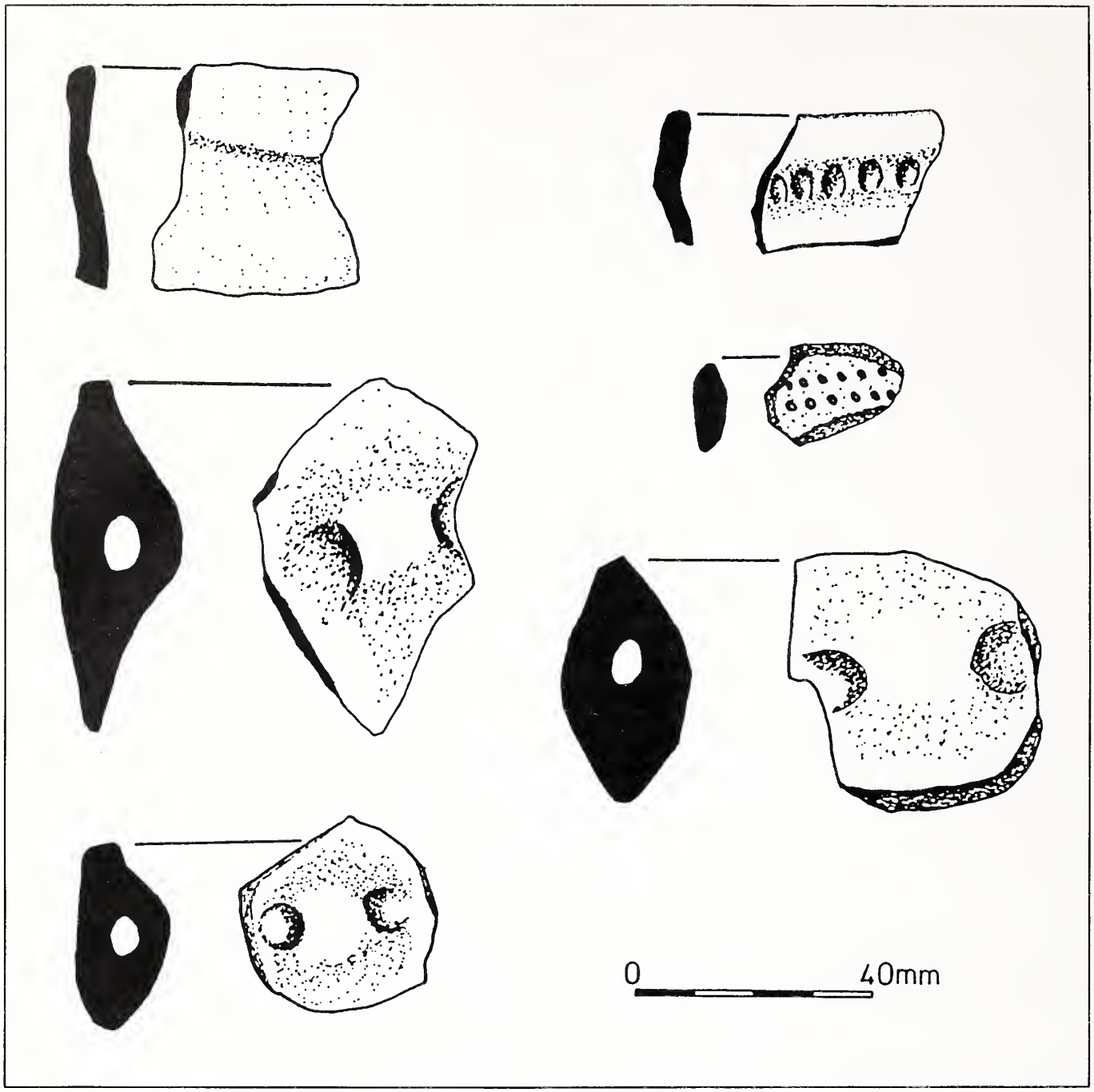


**Fig. 10. Potsherds from the surface collection to the east of the boulders.**

increase in Unit LHS, immediately above L4S, while large samples were also found in L3S and U2S.

There is an interesting inverse relationship between klipspringer and dassie (Fig. 14). The former is more common in the basal three units of Area 3, after which it declines in importance as dassie becomes more important. Cattle (*Bos taurus*) remains are very rare and only fragmentary portions were recovered in UNG and U2S. There is also evidence for goat (*Capra hircus)* on the surface. The presence of small numbers of steenbuck (*Raphicerus campestris)* is also interesting as steenbuck does not supplant klipspringer in importance. This suggests very specific hunting strategies which, amongst contemporary herders in the Richtersveld, involves dogs and hooked sticks. The faunal remains recovered from the pits are almost complete (Fig. 6), indeed in one instance a complete adult and juvenile klipspringer were buried together in a small pit. The remains in the pits seem to have been deliberately deposited after marrow extraction had taken place. The pits have no modern parallels among contemporary Nama herders in the region and need further investigation. One remarkable feature of the fauna is the abundance of juvenile and feotal klipspringers. However, since these small bovids can calve at any time of the year (depending on environmental conditions), no seasonal information can be deduced from their presence. The fragmentary nature of the dassie remains also makes seasonal observations based on tooth eruption sequences

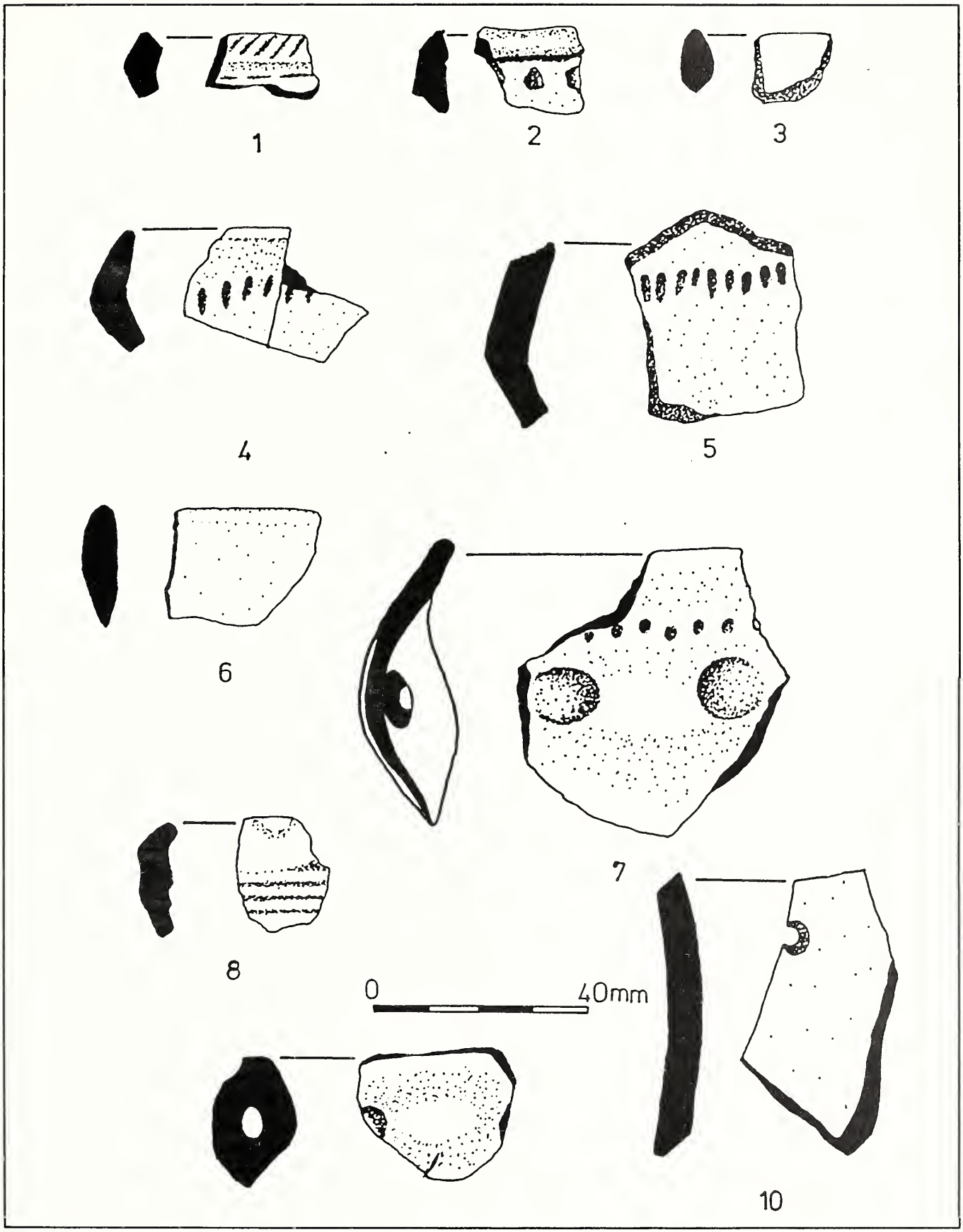


**Fig. 11. Diagnostic excavated pottery: 1 = Y21 S; 2 = Q32 S; 3 = X22 Unit 1; 4 = P32 SS; 5 = Z22 S1; 6 = Z22 S1; 7 = AA23 SS; 8 = AA23 S1; 9 = Y21 Unit 3; 10 = X22 LBS.**

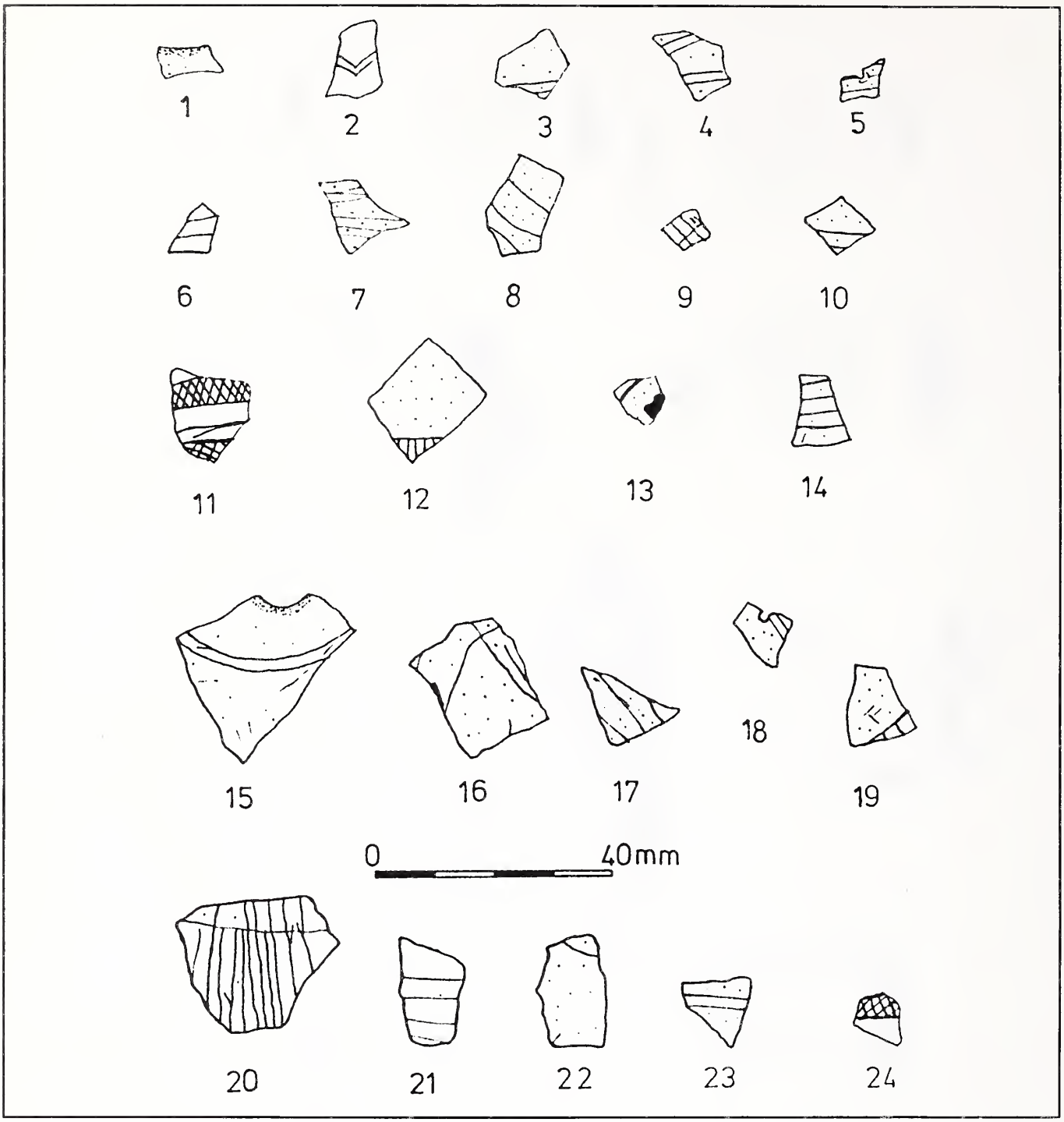


**Fig. 12. Worked and decorated ostrich eggshell pieces: 1 - AA23 S1 (flask mouth); 2 - X21 Unit 1; 3 - P32 SS; 3 - P32 SS; 4 - X21 Unit 2; 5 - X22 Unit 2; 6 - X22 LBS; 7 - Y21 Unit 3; 8 - X21 Unit 2; 9 - X22 Unit 2; 10 - Y21 Unit 3; 11 - Z20 AG; 12 Z20 AG; 13 - Z20 AG; 14 - Z20 AG; 15 - X21 LBS2/3 (also a flask mouth); 16 - Y21 LBS3; 17 - Y21 LBS3; 18 - X21 LBS2/3; 19 - N33 GG3; 20 - X21 LBS4; 21 - X22 LBS4; 22 - X22 LBS4; 23 - X21 LBS4; 24 - X21 LBS4.**

eruption sequences difficult. Cut marks were observed on several of the bones and one bone was coated in red ochre.

Not all the faunal remains are necessarily indicative of diet. For example, red rock rabbits (*Pronolagus rupestris)* and black-backed jackals (*Canis mesomelas*) are hunted by contemporary pastoralists in Namaqualand for their skins. Grey mongoose (*Galerella pulverulenta)* on the other hand, does not have a suitable skin for processing and its meat is not currently eaten.

## DISCUSSION

A comparison of the material culture and faunal remains from the 3 areas excavated around the boulders at /hei-/khomas allows for a tentative construction of the chronology of the site (Table 15). Area 2, with a date of 330±45 BP, fits on top of the sequence in Area 1 and is also comparable with the upper units in Area 3. This is confirmed by large numbers of quartz artefacts as well as

**Table 10. Ostrich eggshell pieces and beads.**

| | Decorated OES | Unfinished beads | Beads | Mean diameter (mm) | Minimum-Maximum diameter (mm) | Number > 7,5 mm |
|---|---|---|---|---|---|---|
| **Area 1** | | | | | | |
| SUR | | | 3 | 75 | 4,5 - 10,5 | 2 |
| GBS | | | 6 | 53 | 4,3 - 7,2 | 0 |
| CCG | | 2 | 6 | 47 | 3,9 - 5,5 | 0 |
| GGW | | 4 | 10 | 46 | 3,4 - 5,8 | 0 |
| GRO | 1 | | 13 | 46 | 3,3 - 5,2 | 0 |
| RO | | | 10 | 43 | 3,3 - 5,4 | 0 |
| RR | | | 2 | 38 | 3,5 - 4,2 | 0 |
| **Area 2** | | | | | | |
| SUR | | | 2 | 52 | 4,5 - 5,9 | 0 |
| SBH | 1 | 2 | 9 | 59 | 4,0 - 8,1 | 2 |
| SLF | | 2 | 10 | 70 | 3,7 - 8,1 | 4 |
| SLV | | 2 | 10 | 61 | 3,9 - 8,2 | 2 |
| **Area 3** | | | | | | |
| SUR | | 2 | 8 | 50 | 3,6 - 5,6 | 0 |
| UNG | 1 | 20 | 48 | 54 | 3,2 - 7,9 | 1 |
| U2S | 3 | 40 | 93 | 51 | 3,2 - 10,4 | 6 |
| L3S | 10 | 25 | 79 | 48 | 3,0 - 8,8 | 4 |
| LHS | 2 | 27 | 87 | 47 | 2,8 - 8,0 | 1 |
| L4S | 5 | 12 | 43 | 45 | 3,1 - 5,9 | 0 |
| L4P | 3 | 5 | 16 | 42 | 3,5 - 5,3 | 0 |

the concentrations of potsherds and ostrich eggshell beads greater than 7,5 mm in external diameter. Although these top units contain significant numbers of marine shell, the decorated eggshell fragments and specularite frequencies are more frequent in the lower units.

Although the date of 1980±120 BP was obtained from close to the base of the excavations in Area 3, there is evidence for even earlier occupation of the site in Area 1. Unit L4S (with the date of 1980 BP) in Area 3, closely resembles units GGW and GRO in Area 1 in terms of relative frequencies of quartz and fine-grained raw materials, as well as pottery and ostrich eggshell frequencies and bead sizes. Unit L4P at the base of Area 3 exhibits the same increase in lithic concentrations and formal tool numbers evident in RO and RR in Area 1. These basal units probably predate 1980 BP, but unfortunately the poor preservation of bone and charcoal makes dating of these units difficult. The archaeological data suggests that there may be a hiatus between short, episodic occupation of the site around 1980 BP and longer, more intensive occupation around 400-300 BP. More dating is required to determine if this hiatus is a true reflection of the occupational history of the site.

Tentatively, the following 3 Phase division is proposed (Table 15):

Phase 3 includes RO and RR from Area 1 and L4P from Area 3. The mean bead diameter is 4,2 mm and

**Table 11. Marine Shell Fragments.**

| | | | | | |
|---|---|---|---|---|---|
| **Area 1** | | | | | |
| CH1 | | | | | *Ocenebra* sp. ? |
| GG2 | | | | | |
| GG3 | *Patella* sp. | | | | |
| OG1 | | | | | |
| RG | | | | | |
| **Area 2** | | | | | |
| SUR | | | | 1 *Bullia digitalis* | |
| SS/BP | | | | | |
| SLS/FAS | | | | 2 *Bullia digitalis* | |
| SLS2/VGS | | | | 1 *Bullia digitalis*<br>1 *Turbonilla* sp.? | |
| SLS3 | | | | | |
| **Area 3** | | | | | |
| UNG | 3 *Patella* sp. | 1 *P. argenvillei* | | 1 *Bullia digitalis* | |
| U2S | | 6 *P. argenvillei* | | | |
| L3S | 4 *Patella* sp. | 3 *P. granatina* | 2 *Choromytilis* sp. | 1 *Bullia digitalis* | 1 *Conus* sp. |
| LHS | | 6 *P. argenvillei* | 1 *Choromytilis* sp. | | 1 *Conus* sp. |
| L4S | | 1 *P. argenvillei*<br>1 *P. granatina* | | | |
| L4P | | 1 *P.granatina* | | | |

there is only one potsherd in these lower layers. Flaked silcrete artefacts amount to 27% as opposed to 18,4% in Phase 1, confirming the greater percentage of fine-grained raw materials in the lower units.

Phase 2 includes CCG, GGW and GRO from Area 1 and L3S, LHS (1980 BP) and L4S from Area 3. The mean bead diameter is 4,7 mm and the potsherd thickness is 5,2 mm. Flaked as well as formal quartz stone artefacts decline in this phase with an increase in the number of silcrete and ccs artefacts.

Unit U2S falls between Phase 1 and Phase 2 and has a mean bead diameter of 5,1 mm and a potsherd thickness of 5,5mm.

Phase 1 includes SUR, SBH, SLF, SLV (330 BP) and SL3 from Area 1, SUR and GBS (420 BP) from Area 2 and SUR and UNG from Area 3. This Phase is characterised by a mean bead size of 5,7 mm, a mean potsherd thickness of 5,7 mm and a relatively high percentage of flaked as well as formal quartz stone artefacts.

With regards the faunal distribution, it is important to note that figures for sheep/goat remain constant in Phases 1 and 11 at around 3% of the total assemblage but falls to 0,4 % in Phase 111. However, klipspringer amounts to some 33% in Phase 1 and almost 60% in Phase 111. There appears to be an inverse relationship between klipspringer and dassie, as the latter amounts to 63,6% in Phase 1 and some 39,3% in Phase 111.

It is important to note that differences in the stone artefact concentrations between Area 1 and 2, on the one hand, and Area 3 on the other, could in part be due to their differing spatial functions. Area 1 does not appear to have been a prime living area but may have been occupied on a more infrequent basis. Stone tool numbers are not really

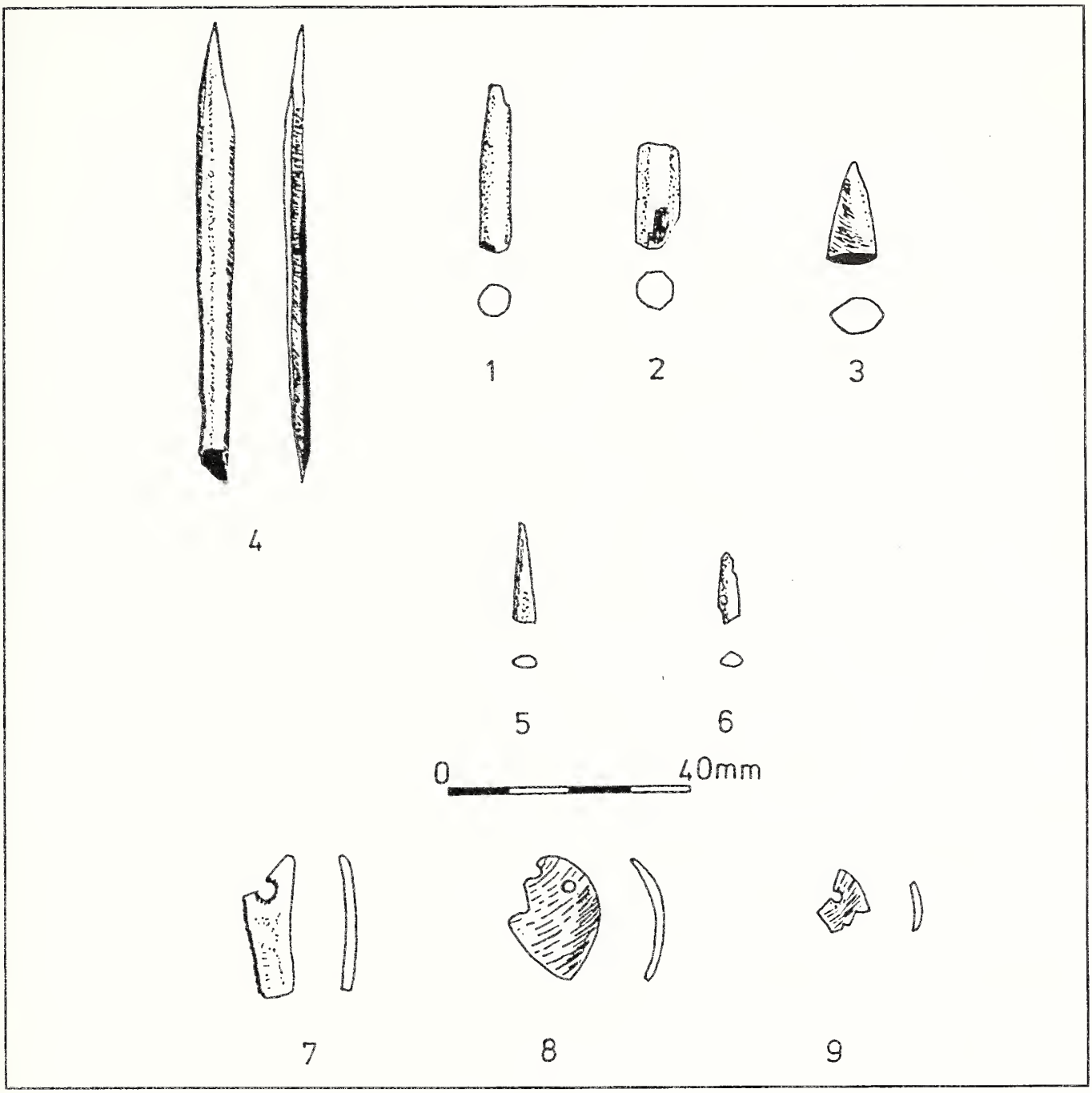


**Fig. 1 3. Bone and shell artefacts: 1 - X22 LBS; 2 - Z20 HAG; 3 - X21 LBS2/3; 4 - AA 23 SS2; 5 - X22 LBS; 6 - N33 GG; 7 - N32 CH1 (bone pendant); 8 - AA23 SS4 (shell pendant); 9 - X22 LBS (shell pendant).**

comparable because Area 3 functioned more prominently in terms of continuous occupation. In addition the evidence for large scale ostrich eggshell bead manufacture and the presence of many marine fragments confirm that Area 3 functioned as the prime living area around the boulders.

The internal homogeneity of the assemblages on both sides of the boulders can be confirmed by a number of cultural items:

a) scrapers and backed tools in the formal toolkit vary in frequency but are nevertheless always present (*i.e.* no new formal tool types are introduced during the occupation of the site);

b) raw materials used in the production of stone artefacts also vary infrequency but, once again, no new raw materials are introduced;

c) decorated ostrich eggshell fragments are present from the basal units and gradually decrease in numbers. They do not, however, decrease or increase significantly with the introduction of pottery.

In this discussion, Vaalhoek is compared with the

**Table 12. Area 1 - faunal remains according to minimum number of individuals (MNI)/ number of identified specimens (NISP)/ and weight in grammes.**

| | SUR | GBS | CCG | GGW | GRO | RO | RR |
|---|---|---|---|---|---|---|---|
| *Procavia capensis* | 3/25/14 | 3/61/40 | 1/19/8 | 1/12/3 | 1/8/3 | 1/17/6 | 1/5/3 |
| *Pronolagus rupestris* | - | - | - | - | - | 1/2/1 | - |
| Leporidae indet. | - | 1/1/1 | - | - | - | - | - |
| *Galerella pulverulenta* | - | 1/2/1 | 1/1/1 | - | - | - | - |
| *Oreotragus oreotragus* | 1/2/1 | 4/331/660 | 2/16/22 | 2/31/6 | 1/6/5 | 2/24/37 | 1/2/1 |
| *Ovis/Capra* | - | - | 1/1/1 | - | - | 1/1/1 | - |
| Bovidae indet. | | | | | | | |
| small | - | 1/21/144 | 1/13/6 | 1/3/3 | 1/6/4 | 1/1/1 | 1/4/1 |
| small/medium | 1/2/1 | - | 1/1/1 | - | - | 1/1/1 | - |
| Squamata indet. | - | 1/1/1 | 1/1/1 | - | - | - | - |
| Chelonia indet. | 1/2/1 | - | 1/6/3 | - | 1/2/2 | 1/2/1 | - |

**Table 13. Area 2 - faunal remains according to minimum numbers of individuals (MNI)/ number of identified specimens (NISP)/ and weight in grammes.**

| | SUR | SBH | SLF | SLV | SL3 |
|---|---|---|---|---|---|
| *Procavia capensis* | 1/3/2 | 5/52/27 | 4/76/59 | 4/101/83 | 3/15/11 |
| Leporidae indet. | - | - | - | 1/1/1 | - |
| *Galerella pulverulenta* | - | 1/1/1 | 1/8/3 | 1/5/1 | 1/1/1 |
| *Canis mesomelas* | - | 1/2/1 | - | 1/2/1 | - |
| *Oreotragus oreotragus* | - | 2/51/52 | 4/49/64 | 3/48/41 | 1/5/3 |
| *Ovis/Capra* | - | - | 1/2/2 | 1/1/3 | - |
| Bovidae indet. | | | | | |
| small | - | 1/10/8 | 1/40/33 | 1/12/10 | - |
| small/medium | 1/1/1 | - | - | - | - |
| large | 1/1/3 | - | - | - | - |
| Squamata indet. | - | - | - | 1/1/1 | - |
| Chelonia indet. | - | 1/3/1 | 1/2/3 | 1/1/1 | - |

upper layers at Rosh Pinah (dating between 760 and 330 BP) in Namibia; with Jakkalsberg (dating to 1300 BP) and Bloeddrift (dating to 355 BP) on the Orange River in the Richtersveld; as well as Spoegrivier (dating between 3 500 BP and 1300 BP) and Bethelsklip (dating between 800 BP and 360 BP) further south in central Namaqualand.

Consideration of the formal tool assemblages at Vaalhoek indicates that Phase 111 amounts to 1,5%, Phase 11 to 1,9% and Phase 1 to 2,0%. This is the opposite of what one would expect, *i.e.* a slight in increase in formal

**Table 14. Area 3 - faunal remains according to minimum number of individuals (MNI)/ number of identified specimens (NISP)/ and weight in grammes.**

| | SUR | UNG | U2S | L3S | LHS | L4S | L4P |
|---|---|---|---|---|---|---|---|
| *Procavia capensis* | 1/6/9 | 3/56/32 | 7/190/114 | 7/255/97 | 3/233/109 | 5/140/65 | 4/73/35 |
| *Pronolagus rupestris* | - | - | 2/12/4 | 2/14/6 | 2/10/7 | 1/1/1 | - |
| cf *Lepus capensis* | - | - | - | - | 1/2/1 | - | - |
| *Galerella pulverulenta* | - | 2/5/3 | 1/9/4 | 1/7/2 | 1/6/2 | 2/6/1 | - |
| Canidae indet. | - | - | - | 1/1/1 | - | - | - |
| *Felis* cf *caracal* | - | - | - | - | - | 1/1/1 | - |
| *F.lybica* | - | - | ?1/1/1 | - | - | - | - |
| *Raphicerus campestris* | - | - | 1/1/1 | 2/4/4 | 1/5/5 | - | 1/2/4 |
| *Oreotragus oreotragus* | 1/2/2 | 1/17/17 | 2/54/48 | 2/42/53 | 3/232/437 | 3/95/179 | 4/118/424 |
| *Ovis aries* | - | 1/1/1 | 1/1/2 | 1/1/6 | 1/1/3 | - | - |
| *Capra hircus* | 1/2/55 | - | - | - | - | - | - |
| *Ovis/Capra* | 1/7/7 | 1/3/3 | 1/9/10 | 1/16/47 | 1/15/13 | 2/2/1 | - |
| *Bos taurus* | - | 1/1/2 | 1/1/3 | - | - | - | - |
| Bovidae indet. | | | | | | | |
| small | 1/3/2 | 1/14/9 | 1/40/22 | 1/24/34 | 2/141/125 | 2/46/36 | 1/31/26 |
| small/medium | 1/5/6 | 1/3/3 | 1/19/22 | 1/17/26 | 1/12/23 | 2/13/66 | 1/4/5 |
| large/medium | - | 1/1/5 | - | - | - | - | - |
| large | - | 1/3/9 | - | - | 1/1/1 | - | - |
| Squamata indet. | - | 1/4/2 | 1/8/3 | 2/15/3 | 2/18/4 | 1/1/1 | 1/1/1 |
| Celonia indet. | - | 1/1/2 | 1/20/15 | 1/4/1 | 1/9/5 | 1/1/1 | 1/1/1 |
| Freshwater mollusc | - | - | 1/1/1 | - | - | - | - |
| Crab | - | 1/1/1 | - | - | - | - | - |

tool numbers with the introduction of pottery. With regards only backed tools (flakes and blades), there is an increase from 15% in Phase 111, to 28,6% in Phase 11, and then a slight drop again to 19,5% in Phase 1 (the latter dating to the last 300 years). Smith and Jacobson (1995:7) also noted a "definite resurgence of retouched microliths" at Geduld in northern Namibia, "which seems to coincide with the appearance of ceramics".

Formal tool percentages at Vaalhoek are slightly higher than at Bloeddrift 23, where they amount to 0,04% and Jakkalsberg A where they amount to 0,05% of the lithic assemblage. There were no formal tools at Jakkalsberg B (Webley 1997) or in the pottery layers at Rosh Pinah (Sievers 1984). At Geduld in Namibia, formal tool numbers varied but there was a mean of 0,3% for the total assemblage. Further south, at Bethelsklip, the formal tool percentages varied, but an average of 0,7% was measured for a layer with a date of 800 BP. Formal tool percentages in the pottery units at Spoegrivier Cave, varied between 0,8% and 3,7% in the pottery layers but there is no consistent trend in either direction.

With regards to pottery at Vaalhoek, the decoration (mainly punctate impressions and horizontal incised lines) as well as lugs, closely resembles the pottery from Jakkalsberg, Bloeddrift 23, Bethelsklip, and Rosh Pinah.The pottery from these sites differs from that at Geduld, which in the lower layers contains burnished corrugations. Potsherd thickness at Vaalhoek varies between 5,2 mm in Phase 111 and 5,7 mm in Phase 1. The potsherd thickness for Jakkalsberg A is 5,7 mm and for B is 5,2 mm and is less than 4,00 mm for Bloeddrift 23. At Rosh Pinah, the mean potsherd thickness varies between 5–7 mm and at

**Table 15: The arrangement of units from Area 1, 2 and 3 into three chronological Phases.**

| | Phase 1 | | Phase 1/11 | | Phase 11 | | Phase 111 | |
|---|---|---|---|---|---|---|---|---|
| | n= | % | n= | % | n= | % | n= | % |
| Mean bead size (mm) | 5,7 | | 5,1 | | 4,7 | | 4,2 | |
| Bead Total | 96 | | 93 | | 238 | | 28 | |
| Mean pot thickness (mm) | 5,7 | | 5,5 | | 5,2 | | 0,0 | |
| Potsherd numbers | 234 | | 166 | | 143 | | 1 | |
| Flaked quartz | 2918 | 74,2 | 2108 | 67,4 | 4559 | 64,9 | 854 | 62,8 |
| Flaked silcrete | 725 | 18,4 | 714 | 22,8 | 1682 | 23,9 | 367 | 27,0 |
| Flakes CCS | 205 | 5,2 | 239 | 7,6 | 651 | 9,3 | 127 | 9,3 |
| Flaked quartzite | 84 | 2,1 | 68 | 2,2 | 136 | 1,9 | 11 | 0,8 |
| **Total Flaked** | **3933** | **100** | **3129** | **100** | **7028** | **100** | **1359** | **100** |
| Formal quartz | 42 | 54,5 | 24 | 39,3 | 38 | 32,2 | 4 | 20,0 |
| Formal Silcrete | 21 | 27,3 | 23 | 37,7 | 51 | 43,2 | 12 | 60,0 |
| Formal CCS | 14 | 18,2 | 14 | 23,0 | 29 | 24,6 | 4 | 20,0 |
| **Total Formal** | **77** | **100** | **61** | **100** | **118** | **100** | **20** | **100** |
| *P. capensis* | 334 | 63,6 | 190 | 72,0 | 667 | 57,9 | 95 | 39,3 |
| Leporidae gen. | 1 | 0,2 | 12 | 4,5 | 27 | 2,3 | 2 | 0,8 |
| *O. oreotragus* | 174 | 33,1 | 52 | 19,7 | 422 | 36,6 | 144 | 59,5 |
| *Ovis/Capra* | 16 | 3,0 | 10 | 3,8 | 36 | 3,1 | 1 | 0,4 |
| Total NISP fauna | 525 | 100 | 264 | 100 | 1152 | 100 | 242 | 100 |

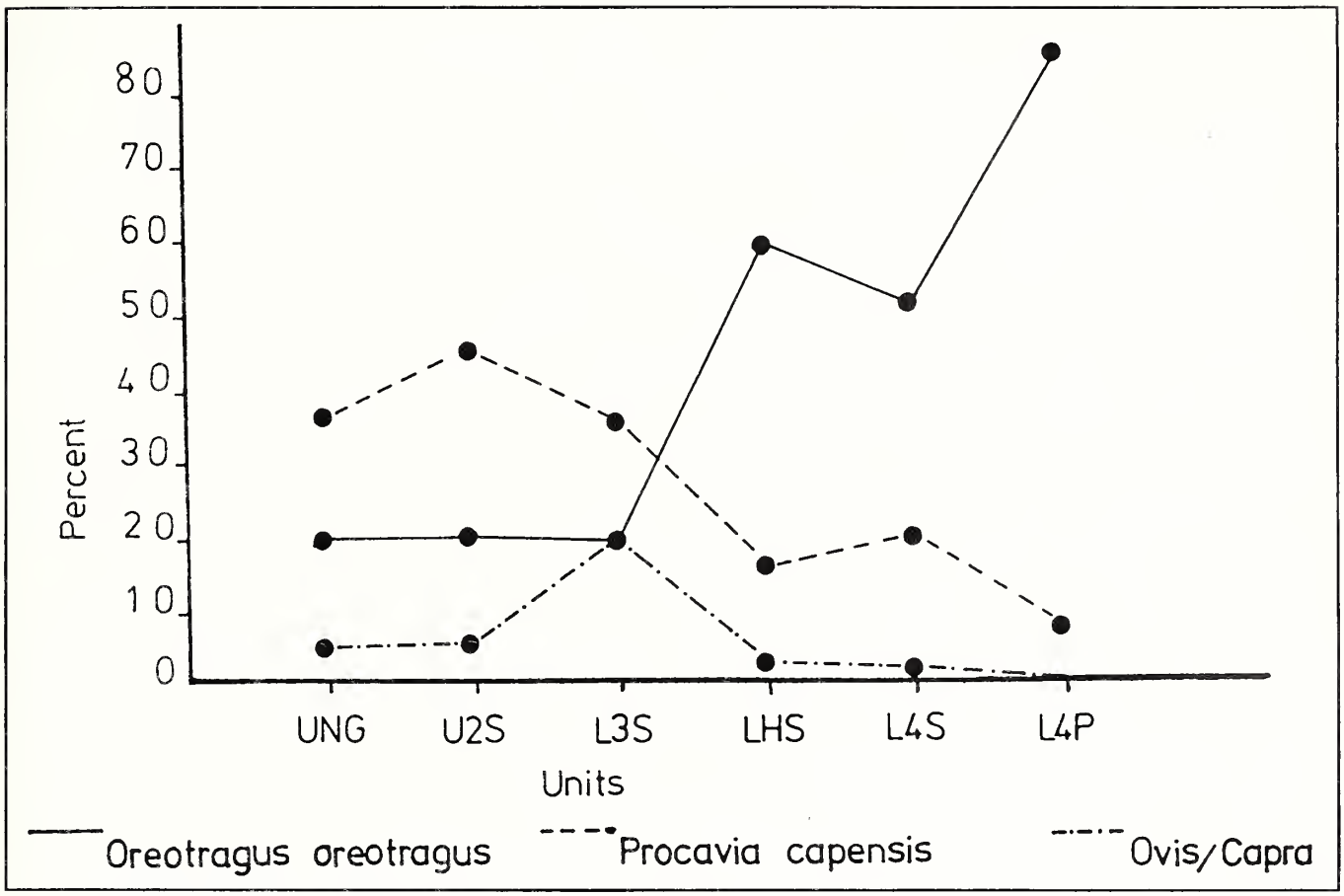


**Fig. 14 Area 3: the percentage mass of klipspringer, dassie and sheep/goat.**

Bethelsklip it amounts to 5,7 mm. At Spoegrivier Cave, the pots-herds are thinner (4,8 mm) in the layers dating to 1980 BP than in the upper layers (6,1 mm) dating to 1300 BP. There appears to be a trend towards slightly thicker potsherds through time at all these sites with the exception of Bloeddrift.

Decorated ostrich eggshell pieces seem to be a feature of Northern Cape sites such as Wonderwerk Cave, Dikbosch, Limerock and Little Witkrans Shelter (Humphreys & Thackeray 1983) where they have been found in units dating to as early as 13 500 BP. They were also recovered at Rosh Pinah in southern Namibia (Sievers 1984) and Spoegrivier Cave, on the Namaqualand coast, but not at Bethelsklip, Geduld or Bloeddrift. At Spoegrivier Cave they were found in layers dating to 2400 BP (Webley 2001) and therefore predate herding. However, at many Northern Cape sites they have been found in units together with pottery and dating to within the last 2000 years. The presence of a number of decorated ostrich eggshell fragments from Vaalhoek is interesting in the light of a more limited sample from Jakkalsberg (Webley 1997) dating to 1300 BP.

The mean ostrich eggshell bead diameters from Vaalhoek for Phase 111 (1980 BP) is only 4,7 mm and the increase to 5,1 mm occurs at the interface between Phases 11 and 1. Means of around 6,0 mm are only reached in the period 400 – 300 BP (Phase 1). Geduld, in Namibia, shows the same incremental increase in mean bead sizes as that observed at Vaalhoek, with Levels 14-8 (2 300 BP) measuring 4,6 mm, level 7 (1980 BP) measuring 5,5 mm and Levels 6 and 5 (1790 BP) measuring 6,1 mm. The significant change occurs in Level 7, which dates to 1980 BP, and is associated with the first appearance of ceramics, but not domestic stock. At Spoegrivier Cave (Webley 2001) in Namaqualand, the mean bead diameter increases from around 4,4 mm in the pre-pottery layers to 5,2 mm in Layer 6 (introduction of pottery) dating to 1980 BP. There is another increase in bead sizes to 6,2 mm in Layer 2 (1300 BP) coinciding with increases in sheep numbers. Geduld, Spoegrivier Cave and Vaalhoek appear to show a similar trend in increasing mean bead diameter but these trends appear to be slightly earlier at Geduld. Clearly, more dates are needed from Vaalhoek to confirm this.

The mean bead diameter from Jakkalsberg A (dating to 1330 BP) is 6,0 mm and at the B site is 5,7 mm (Webley 1997). Bloeddrift 23 (Smith *et al.* 2001), some 30 km from Jakkalsberg has a mean of 7,6 mm. Yates (1995) has indicated that the initial impetus to larger beads occurs together with the first appearance of ceramics, rather than domestic stock.

To sum up, in terms of cultural remains, Vaalhoek appears to resemble Bethelsklip (Webley 1984) more closely than either Jakkalsberg or Bloeddrift 23, which are located nearby and which have been designated as

pastoralist sites. It also resembles Rosh Pinah (Sievers 1984) across the Orange River in southern Namibia.

With regards the faunal remains from the site, it would appear that the inhabitants hunted klipspringer (small game) almost exclusively (60%) in Phase 111, with dassie (very small game) gradually becoming more important in Phase 1. Sheep/goat is introduced, possibly around 1900 BP, and stays a constant 4% of the faunal assemblage. Other very small game, such as red rock rabbit, grey mongoose and jackal never amount to a significant portion of the diet.

This restricted diet remains constant for some 2000 years, suggesting a remarkably localised exploitation strategy (Brink, pers. comm.). There is no evidence that the inhabitants of the site crossed the mountains to hunt larger game on the plains. Sites such as Kokerboomkloof (Webley *et al.* 1993) indicate the presence of game such as springbok and zebra in the area called Springbokvlakte.

The disposal of the faunal remains at Vaalhoek also raises some interesting issues. A number of pits containing faunal remains (in the majority of cases that of klipspringer) were discovered at the site. Such faunal pits are not common in Northern Cape sites. The presence of a complete adult and foetal klipspringer in one pit may be an indication of certain ritual practices which have no modern equivalents.

Sadr and Plug (2002) have observed of two sites in southeastern Botswana that, as the proportion of domestic stock increases through time, large and medium game numbers remains unchanged but there is a sharp drop in small and very small game numbers. They have proposed that amongst the foragers of southeastern Botswana, livestock was equated with the socially unimportant smaller game rather than the meat of large or medium game. Small game, they note, is not subject to the same sharing ethic among the San and since livestock, in effect, took the place of small game, this would have facilitated the gradual transformation toward a pastoralist society. Vaalhoek is not directly comparable with this observation, as it has no evidence for the hunting of medium or large game. Furthermore, the hunting of dassie increases with the acquisition of sheep, rather than declining.

## CONCLUSIONS

The archaeological deposit from Vaalhoek, like Spoegrivier Cave (Webley 2001) further south on the west coast of Namaqualand, spans an important time period during which domestic stock and ceramics were introduced to the region. It is unfortunate, however, that the stratigraphy of the site is not well developed and the cultural and faunal remains not well preserved. Vaalhoek is therefore not as informative as sites such as Geduld and Spoegriver Cave spanning the same time period.

The original inhabitants of the site during Phase 111 were almost certainly hunter-gatherers. However, the archaeological evidence seems to point to these hunter-gatherer groups acquiring ceramics (and perhaps livestock) as early as 1900 BP. Unfortunately, the single sheep sample from Area 3, which was submitted for dating, did not have sufficient protein for an accelerator radiocarbon date and therefore the date of 1980 BP for the introduction of sheep to the Richtersveld, cannot be confirmed. However, the accelerator radiocarbon dates of c. 1900 BP on sheep remains from Spoegrivier Cave (Webley 2001) and Blombos Cave on the Cape south coast (Henshilwood 1996) suggests that an equally early date from the Richtersveld is not unlikely.

The introduction of ceramics seems to have triggered an increase in mean bead diameter, suggesting changes in behaviour (Yates 1995). However, the acquisition of domestic stock (i.e. sheep) at Vaalhoek does not seem to have had a similar impact on other items of material culture. The fact that the occupants of the site appeared to have relied on sheep for at least 4% of their diet, suggests some modification of their social system. Does it herald a transformation to pastoralism?

If a pastoralist site is defined as having a predominance of domestic stock in the faunal assemblage, then the faunal remains in Phase 1 at Vaalhoek clearly do not point to a pastoralist society. An example of this extreme type of pastoralism may be found at Jakkalsberg A & B (Brink & Webley 1996) where domestic stock amount to more than 90% of the mammal assemblage. However, it is important to note that Jakkalsberg is located on the Orange River, with plentiful supplies of fresh fish. It is very difficult to measure the importance of the fish to the inhabitants of Jakkalsberg because of the relatively poor preservation of the fish remains (Brink & Webley 1996).

The inhabitants of Vaalhoek had as their main source of food, the game in the surrounding mountains, i.e. mainly of klipspringer and dassie. It is tempting to suggest that the site represents the winter outpost and that, as in the past, herders would have moved down to the Orange River in the summer months, where they relied more heavily on fish and sheep. Currently, herders seldom slaughter their livestock in winter when there are plentiful supplies of milk and veldkos (Webley 1986). The absence of domestic stock at a site, does not, as I have indicated elsewhere, mean that the site must represent a hunter-gatherer settlement (Webley 1986).

The scenario described above, suggests that that the site represents one end of a transhumant cycle, during which pastoralist groups utilised the resources of the area during the winter months. Another scenario is that the site continued to be visited until modern times by hunter-gatherer groups who acquired livestock from their pastoralist neighbours. The ceramics and larger ostrich eggshell beads would have to be interpreted as trade items as well.

The two dates from the western side of the boulder, that of AD 1640 and 1474 are of interest as they coincide with the Little Ice Age, a period between AD 1300 and 1800 when conditions in many parts of South Africa were both cooler and drier that they are today (Tyson *et al.* 2001). In fact, many of the settlements in the Kuiseb River delta in southern Namibia were abandoned between 1460 and 1640

(Burgess & Jacobson 1984). While conditions are estimated to have been some 1°C cooler than present, this may not have impacted negatively on human occupation in this part of the Richtersveld. However, if cooler conditions were coupled with drier conditions, then this would almost certainly have made settlement in this region extremely difficult. This may have resulted in the site being abandoned in the 17th century.

The introduction of ceramics and later, sheep, does not seem to have impacted significantly on the economy and the social life of the inhabitants of Vaalhoek. Similar observations have been made at many sites in Namibia, the Northern and Western Cape. Isolated sites such as Kasteelberg (Smith *et al.* 1991), or Jakkalsberg (Webley 1997) appear to offer a relatively clear-cut view of the advent of pastoralism in southern Africa (Bousman 1998). The vast majority of sites, however, are as enigmatic as Vaalhoek. They contain tantalising fragments of material culture and glimpses into a mixed economy quite unlike that which researchers would predict from the historic records. These sites suggest that the transition to pastoralism was a very complex process (Kinahan 1996), which took many turns during the last 2000 years. Documenting this variability, without preconceived notions about what it represents, should be the first stage in our research.

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# AN INTRODUCTION TO THE LATER STONE AGE RESEARCH PROJECT ALONG THE SOUTH-EASTERN CAPE COAST

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## ABSTRACT

This paper introduces research conducted along the Cape St Francis part of the south-eastern Cape coast between 1981and 1992. In order to do a systematic study, the coast and adjacent shifting dune area was divided into eight zones according to concentrations and geographical location of archaeological features. Within these zones, sites with different cultural identities were excavated and sampled between the immediate coastline and five kilometres inland.

## INTRODUCTION

During 1981 a long term research project was started in the south-eastern Cape with the aim to investigate and to contrast economic and settlement patterns along the Cape St Francis coast and the adjacent mountains. Several site reports have been published on the research conducted in the adjacent Kouga/Baviaanskloof mountains (Binneman 1997, 1998, 1999, 2000). This paper introduces the coastal part of the research project in the south-eastern Cape and more specifically the archaeological character of the region and the research approach followed. The results of the study will be discussed elsewhere.

The research area defined here as the south-eastern Cape, follows roughly the provincial boundaries between the Eastern and Western Cape Provinces and includes the coastal and adjacent mountain regions between the Bloukranz River Mouth and Gamtoos River Mouth (Bruton & Gess 1988; Lubke *et al.* 1988; Lubke & De Moor 1998). The Cape St Francis coast comprises the region between the Kabeljous River Mouth to the east and Klasies River Mouth to the west (Figs 1 & 2).

My first visit to the Cape St Francis coast was in 1981. During this visit I walked most of the coast between Oyster Bay to the west and St Francis Bay to the east and large areas of the shifting dune field between the two resorts (Fig.3). The two aspects which I noticed immediately during that visit, were, the richness and variety of the archaeological features and the immense threat posed to these sites by human activities.

During 1982 developers started to stabilise the coastal dunes outside St Francis Bay with branches. This was completed by the end of 1983 and during 1987 the whole area was divided into erven and tarred roads and other facilities were constructed. In the process many archaeological sites were demolished (Figs 4a, b, c & 5). Today, the whole area is covered by numerous residential buildings and a harbour complex was constructed between St Francis Bay and Cape St Francis Point.

At first a rescue operation was initiated in 1981, aimed at excavating and sampling some of the archaeological features which were under immediate threat of destruction in and around the townships of St Francis Bay and Cape St Francis. However, in 1982 I decided to convert the rescue operation to a full research project. The reason was that open-air shell middens represent single moments in time, and therefore provide limited information and it is only when a large number of these features are investigated that they can be interpreted in terms of settlement strategies, social and economic patterns. During the next few years a large number of shell middens were excavated and sampled (Binneman 1996).

Several coastal caves and shelters were also test excavated and sampled. The well-preserved deposits provided a time sequence and a framework into which the open-air observations and information could be plugged.

## PHYSICAL ENVIRONMENT

The coastal foreland comprises a gently undulating plain deeply incised by rivers such as the Tsitsikamma, Kromme, and Seekoei. A striking feature of the landscape is the gravelled terraces at various contour intervals (200 m, 100 m, 60 m and 30 m) which are related to a descending

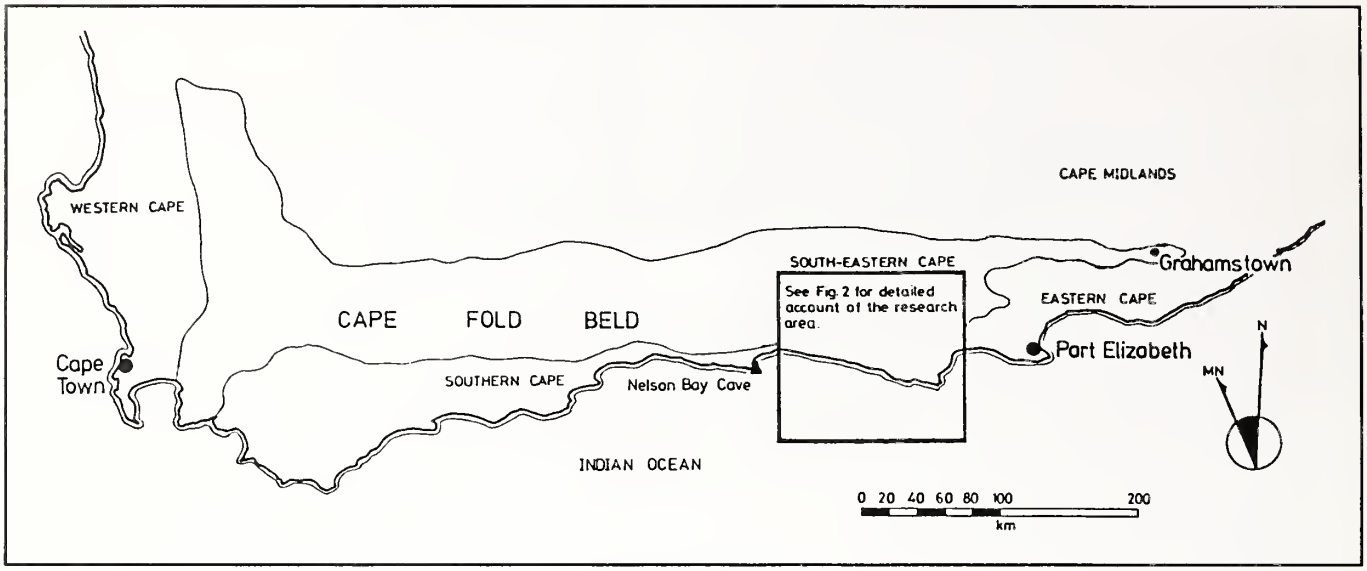


**Fig. 1. Map of the south-eastern Cape research area in relation to adjacent regions.**

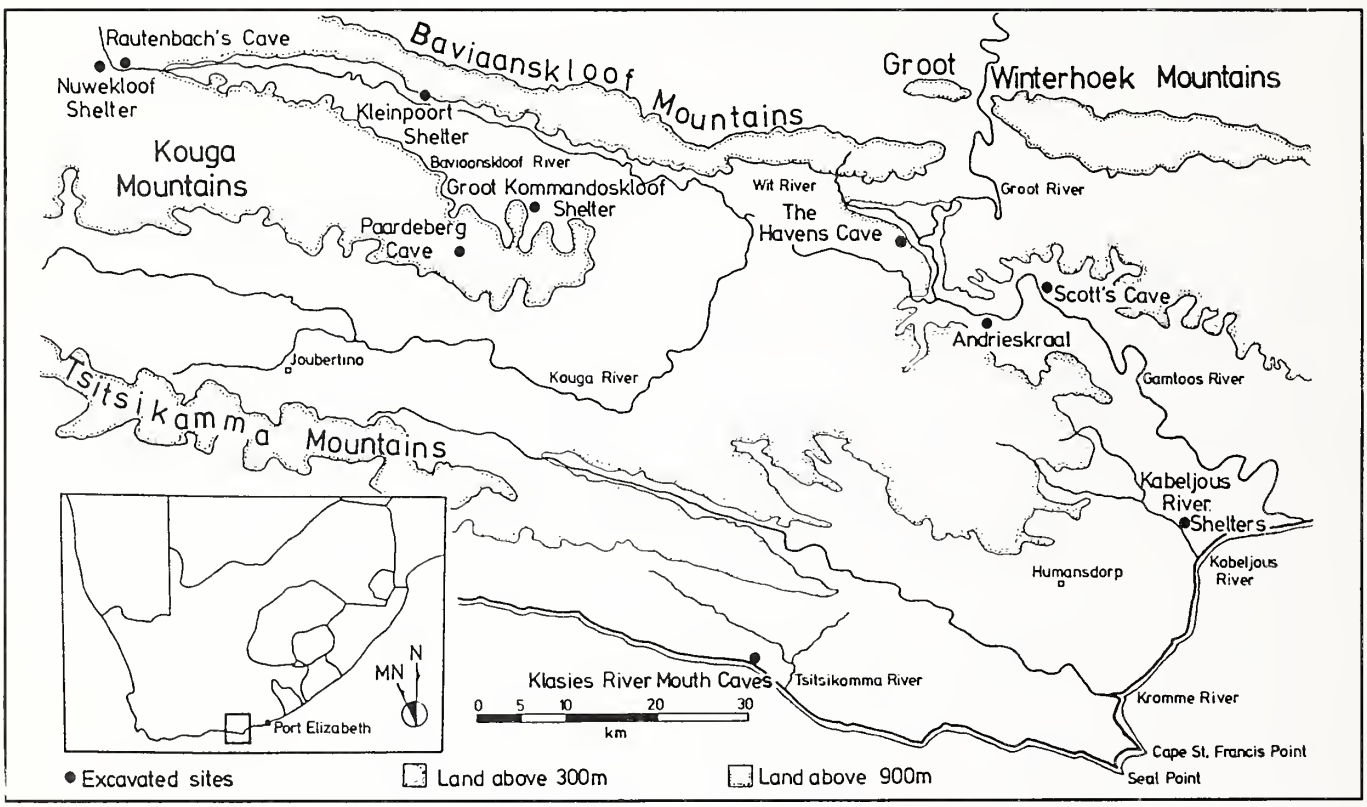


**Fig. 2 Detailed map of the south-eastern Cape research area and excavated sites.**

sequence of high sea levels (Butzer & Helgren 1972). The coastal region is dominated by rocks of the Cape Supergroup, and Table Mountain quartzites and sandstones underlie most of the area.

The coast is characterised by a series of halfmoon sandy bays, Slangbaai, Thysbaai, Seal Bay and St Francis Bay, all facing eastward. Adjacent to the coast are small dune areas, remnants of a far larger system in the past. These include the well-known Geelhoutboom dunes above the Klasies River Caves, Brandewynkop and the large dune field stretching from Oyster Bay to the mouth of the Kromme River. The latter is an extensive dune field of parallel longitudinal dunes which run in the direction of the prevailing winds (west to east), and are refered to as hairpin dunes (Heydorn & Tinley 1980; Tinley 1985).

The large shifting sand dunes are underlain by ferricretes, calcretes and fossilized dune sands which are situated on top of Table Mountain Sandstones. Due to the continuous movement of the dunes, many new sites appear all the time while simultaneously others are covered. The deflation bays

**Fig. 3. View of the shifting dune bypass system between Oyster Bay (bottom left) and St Francis Bay (top centre).**

**Fig. 4a. View of shell middens among the shifting dunes at Second Bush, 1981.**

between the dunes are often waterlogged in winter. These waterlogged areas usually support grass and other vlei vegetation. A stream, the Sand River also passes through the dunes, but is only visible for short intervals between them. Often many of these old vlei areas are exposed between the dunes in huge dark grey blocks and floors.

Cowling (1982) recognises four major plant communities along the coast. The dune fynbos, which is restricted to the immediate coastline, consists of three elements: fynbos, dune thicket and dune grassland. The dune fynbos is typical of the south western Cape, excluding the large leafed proteas. The dune thicket comprises the large leafed tall shrubs with numerous climbers and is related to many tropical species along the east coast. This dune thicket, when in protected areas, may develop into thick low forest. The dune grassland comprises a mixture of tropical and temperate grassland species and numerous bulbs. The grasses usually occur between the parallel dune ridges on waterlogged sites.

The region experiences a warm temperate climate with mild temperatures. Although rainfall may occur at any time of the year, the highest downfall occurs during the winter months, ranging between 500 mm and 800 mm annually. It is prone to strong winds, mostly during spring, with the prevailing wind direction from the west and south-west (Tyson 1964).

**Fig. 4b. The stabilisation of the dunes with branches resulted in the covering of shell middens as well (early 1982).**

**Fig. 4c. The same location now with roads. A small boat harbour was built where the road ends during the 1990s.**

## ARCHAEOLOGICAL BACKGROUND OF THE REGION

### Previous archaeological research in the region

Prior to 1981 little research was conducted in the area. Amateur archaeologists were responsible for some excavations and collections along the Cape St Francis coast (collections made by Mr W. Gess and Mr L. Abel are housed in the Albany Museum). They also 'discovered' the Klasies River Caves in 1955 and reported it to archaeologists at the South African Museum.

Large collections of Earlier and Middle Stone Age stone tools were made by Laidler (1947) in the sand dunes on the farm Geelhoutboom above the Klasies River Caves. Rudner (1968) reported numerous open-air shell middens along the immediate coastline and described the pastoralist ceramics and stone artifacts found on these sites.

The first excavations in the region were conducted in 1925 by Dr John Hewitt, Director of the Albany Museum between 1910 and 1958, in rock shelters near the mouth of the Kabeljous River (Hewitt 1925). I re-excavated one

**Fig. 5. Badly damaged shell midden with a 'For Sale' sign, 1988.**

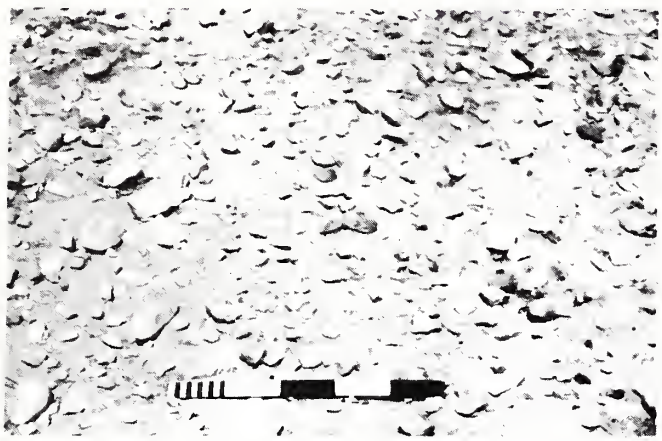

**Fig. 6. Earlier Stone Age handaxes and cleavers mixed with Middle Stone Age stone tools in the Thysbaai dunes.**

of the shelters in 1984 (Binneman 1996). At St Francis Bay Thackeray and Feast (1974) removed a burial and Cairns (1975) excavated a stone feature.

During the 1960s the University of Chicago (1982) excavated several of the caves and shelters at Klasies River Mouth. Between 1984 and 1999 the Archaeology Department at the University of Stellenbosch conducted further excavations, mainly at Klasies River main site (Deacon 1995; Deacon & Geleijnse 1988; Deacon & Schuurman 1992). I have also conducted test excavations at Cave 1 and 5 during 1984 (Binneman 1985, 1996; Hall & Binneman 1987; Henderson & Binneman 1997).

Further along the Tsitsikamma coast, FitzSimons, Director of the Port Elizabeth Museum between 1906 and 1936, excavated several caves and rock shelters which included Coldstream and Whitchers Caves (FitzSimons 1921, 1923, 1926). Coldstream Cave was first excavated in 1907 by Mr E. Whitcher and again in 1911 by Mr Drury from the South African Museum in Cape Town. The excavations at the site yielded four painted stones and a large number of skeletons. At Whitchers Cave, which is some 15 km inland, FitzSimons excavated more than 50 skeletons.

Two excavations were also conducted in 1965 and 1967 by H.J. Deacon at a cave at Storms River Mouth in the Tsitsikamma National Coastal Park (Deacon, H. J. 1970).

## ARCHAEOLOGICAL CHARACTER OF THE REGION

The immediate coastline and adjacent shifting dune system are rich in open archaeological sites, features and material representing the Earlier, Middle and Later Stone Age. The active movement of dune sand opens and covers sites and material on a daily basis. In recent years alien vegetation invaded most of the dune system and covered the sand and prevented the exposure of sites.

### Earlier Stone Age

Although no hominid remains dating from the Middle Pleistocene have been discovered, handaxes and cleavers from this period were found scattered throughout the coastal region, most often mixed with Middle and Later Stone Age material (Fig. 6).The best known locality for the occurrence of Earlier Stone Age artefacts is in the dunes on the farm Geelhoutboom on the coastal foreland behind the Klasies River Caves. A large collection of Earlier and Middle Stone Age arefacts made by Laidler (1947) are housed in the Albany Museum.

Handaxes and cleavers are also common in the dunes east of Thysbaai. Only a few handaxes, however, were observed in the dune system between Oyster Bay and St Francis Bay.

### Middle Stone Age

The most important occurrence of Middle Stone Age occupation not only of this region, but also in the world comes from the well-known Klasies River Caves 1 and 5 (Singer & Wymer 1982; Deacon 1995). The main site also yielded the world's oldest remains of anatomical modern people and possibly the oldest evidence for marine food exploitation (Deacon & Schuurman 1992).

Middle Stone Age stone artefacts are also found in the dune fields in the region. A few kilometres east of Geelhoutboom, in the Brandwynskop dune field, are large numbers of stone tools, but there is no other material associated with them. The Middle Stone Age sites in the dune field between Oyster Bay and St Francis Bay, however, are also associated with faunal remains. One such site is situated some two kilometres east of Oyster Bay. Here a large assemblage of fossilized bone and brown hyena coprolites were found in assossiation with Howieson's Poort stone tools (Carrión *et al.*2000) (Figs 7 & 8).

At the eastern end of the dune field were remarkable Middle Stone Age 'factory' sites which consisted of large circular piles of flakes and cores. Most of the flake piles represent unique 'moments in time' where large numbers of flakes were produced from a single core (Fig. 9).

As mentioned earlier, old vlei areas are exposed between the dunes as hard dark grey floors. These floors acted as firm surfaces for camp sites in the past and also as catch-

**Fig. 7. Faunal remains associated with Howieson's Poort stone tools in the dunes near Oyster Bay.**

**Fig. 8. Brown hyaena coprolite associated with Howieson's Poort stone tools in the dunes east of Oyster Bay.**

**Fig. 9. Middle Stone Age 'moment in time' in the Goedgeloof dune area.**

ments for archaeological material deposited on the dunes. The continual movement of dune sand exposes and covers these floors and the material situated on them (Figs 11, 12 & 13). Unfortunately, the continual movement of sand not only exposes sites (or protect them from the elements), but also destroys them slowly (Fig. 14).

**Fig. 10. Shell midden on the edge of a vlei in the Goedgeloof dune area, some 5 km from the coast.**

### Later Stone Age

The majority of the archaeological features were located within a few hundred metres of the highwater mark, but a large number of shell middens were also situated some five kilometres from the coast in the shifting dune bypass system between Oyster Bay and St Francis Bay (Fig. 10).

## THE LATER STONE AGE COASTAL PROJECT

### Research approach

As mentioned earlier, the coastal project initially started as a rescue operation in 1981. At first a small number of damaged and threatened shell middens were excavated sampled and dated. However, this approach yielded limited information and it was decided to convert the venture into a research project. This resulted in the addition of 22 new radiocarbon dates to the existing seven for the region.

In order to do a systematic archaeological study of the open-air shell middens of the area, eight zones according to concentrations and geographical location of archaeological features (Figs 2 & 3) were identified along the Cape St Francis coast and adjacent shifting dune area. The archaeological features in each of the zones will be discussed elsewhere.

In the investigation of the archaeological sites along the Cape St Francis coast I devised the following research strategy. Firstly, on a macro-scale, open air shell middens along the shore zone (within 300 m from the coast) were investigated and contrasted with those further inland (up to 5 km from the coast). The same strategy was followed with cave and shelter sites. Secondly, on a micro-scale, selected shell middens which displayed distinctive features such as the presence or absence of pottery, or the absence of formal stone artefacts were investigated and sampled to establish possible economic and social patterns. Thirdly, also on the micro-level, individual shell middens at different ecological settings along the coast were investigated and sampled to gain insight into collecting strategies and possible distances travelled to collect shellfish. The results of this study will be discussed elsewhere (Binneman in prep.).

**Fig. 11. A recent exposed hard grey soil surface with bone remains.**

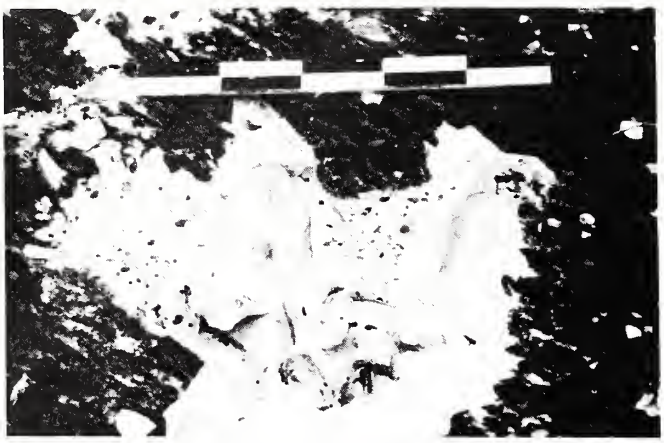

**Fig. 12. Eland horns associated with Later Stone Age tools exposed on a soil surface in the Goedgeloof dunes.**

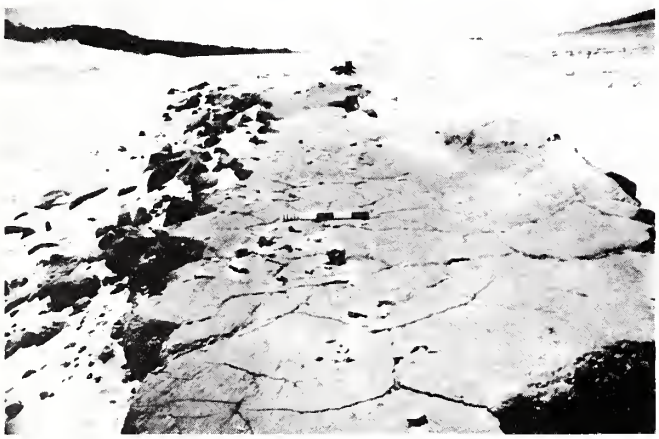

**Fig. 13. Later Stone Age stone tools and bone situated on a recent exposed hard grey vlei soil surface.**

To study the shellfish collecting patterns of the different groups, I divided the coast into five ecological habitats, namely sandy beaches, bench coasts, boulder coasts, wave coasts and high energy coasts. Material was excavated or sampled from all the different types of shell middens in the direct vicinity of each habitat. Observations were made

**Fig. 14. The damaging effect of wind and sand erosion on an exposed shell midden in the Goedgeloof dunes.**

within each of these habitats to establish which shellfish species were available and which could be collected at different tidal conditions.

Sandy beaches

Long half moon sandy beaches, such as Slangbaai, Thysbaai, Seal Bay and St Francis Bay, are poor in *Donax serra* (white mussel). *D. serra,* the only important shellfish species found along sandy beaches, is only to be found in great abundance from approximately Jefferey's Bay eastward to Port Elizabeth. This species can easily be collected during all tidal conditions by either digging or by twisting ones feet into the sand and 'feeling' for them. *D. serra* contains a relatively high meat mass per individual and a large number can be collected within a few minutes The meat is soft and tasty to eat.

Bench coasts

Flat rocky areas exposed extensively during low tides (upper balanoid zone) support abundant *Oxystele* spp. in the numerous shallow pools. *Patella oculus* are also abundant and small to medium large *Turbo sarmaticus* are often found in relatively large numbers. Large *T. sarmaticus* and *P. longicosta* are present along the neap tide low zone. Most of the larger shellfish species occur along the lower balanoid zone which is exposed during spring and neap tide lows. The so-called *cochlear* zone is also exposed during this period for three to four days during low tide. As the name name indicates, *P. cochlear* are super abundant in this zone. *P. argenvillei* are also present in large numbers. Other species present are *Haliotis midae, H. spadicea, P. tabularis, P. barbara* and *T. sarmaticus*. Small fish are abundant and the occasional octopus may be found in the shallow pools.

Boulder beaches

Large round boulders with intertidal sand support shellfish species similar to those of the bench coast except that *Dinoplax gigas* are also present, often in fair numbers under the boulders.

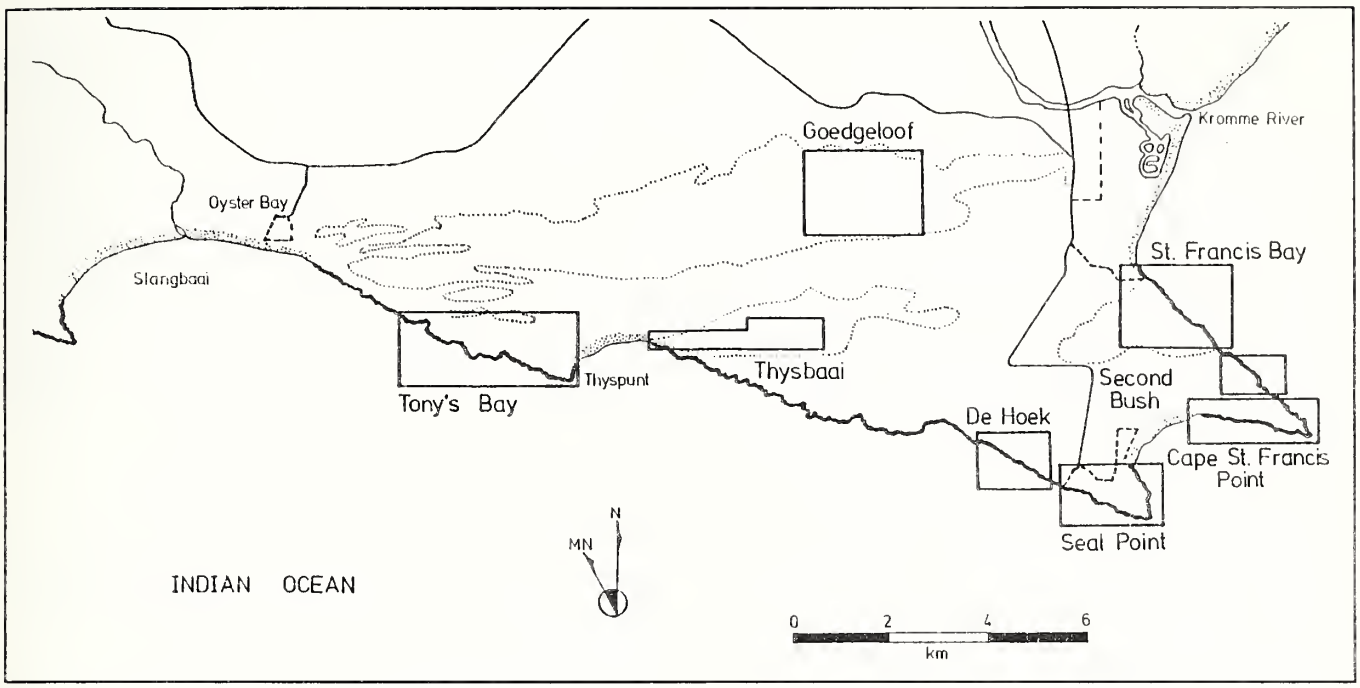


**Fig. 15. Map of the different locations sampled along the Cape St Francis coast.**

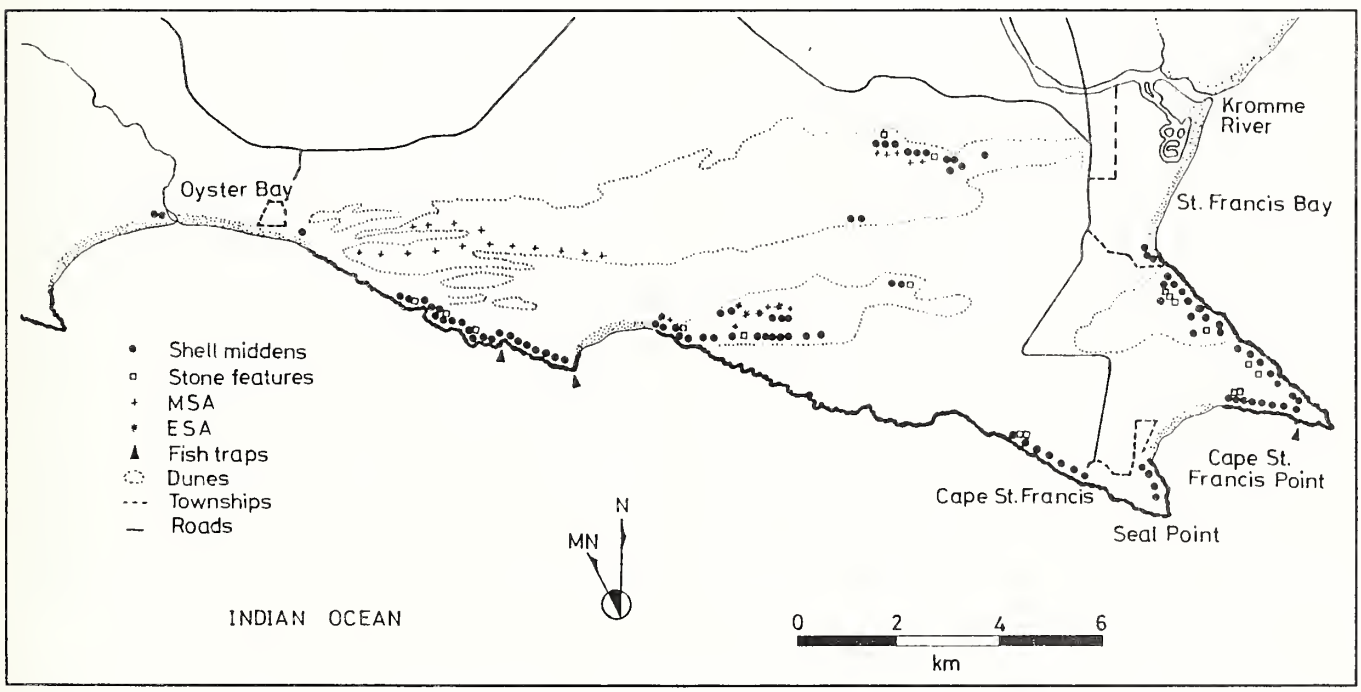


**Fig. 16. Map of the distribution of archaeological sites along the Cape St Francis coast.**

Wave coasts

Rough stepped rocky outcrops in sheltered bays usually rise from a few metres of deep water to a few metres above the spring high level. Waves constantly break over the rocks and pools during high tide. *Perna perna* is often found here in large quantities along the high water level. *Oxystele* spp. and *P. oculus* are present in the pools and *Burnupena* spp. may also be present in fair numbers. The *cochlear* zone is exposed during spring tide low, but it is dangerous to collect shellfish from this zone because one can be washed from the rocks.

High energy coasts

Rugged rocks several metres above the water face the open sea in some places. Huge waves constantly break fiercely against the rock walls and numerous deep gullies with a brisk wash action. These coasts are extremely dangerous for collecting shellfish and one can easily be

Table 1. Ranking of shellfish species (modern day collection in terms of mean size, total mass, meat mass and ERR.

| Shellfish species | Mean size/mm | Mean total mass/gr | Mean meat mass/gr | % EER |
|---|---|---|---|---|
| *Haliotis midae* | 121 | 258 | 141 | 55 |
| *Solen capensis* | 114 | 33 | 21 | 64 |
| Patella tabularis | 90 | 98 | 19 | 21 |
| Patella barbara | 90 | 80 | 17 | 21 |
| *Turbo sarmaticus* | 74 | 130 | 26 | 20 |
| *Patella oculus* | 70 | 33 | 8 | 24 |
| *Patella longicosta* | 70 | 30 | 6 | 20 |
| *Patella argenvillei* | 66 | 42 | 11 | 26 |
| *Perna perna* | 66 | 20 | 7 | 35 |
| *Patella miniata* | 63 | 24 | 6 | 25 |
| *Haliotis spadicea* | 58 | 39 | 23 | 59 |
| *Patella cochlear* | 57 | 16 | 3 | 19 |
| *Donax serra* | 51 | 24 | 10 | 42 |
| *Oxystele* spp. | 32 | 12 | 2 | 17 |

washed from the rocks. *P. perna* and *Patella* spp. are usually abundant along these coasts.

**Collection of samples and methods of analysis**

Shell middens were sampled by means of column excavation, grab samples and surface collecting. Columns were excavated in units of square metres or parts thereof, aimed at sampling the total range of archaeological remains. Grab samples consisted of one bucket (0,01 cubic metre) *in situ* material and was aimed at obtaining a representative sample of shellfish and/or other food waste or cultural material. Surface sampling consisted of either one bucket of slope material to obtain a representative shellfish sample or manual collections of bone remains and stone tools.

The shellfish remains from each midden, layer and feature were sorted into species (divided into left and right in the case of bivalves), counted and measured. This was done to convert shell size to meat mass. The different shellfish species were identified, counted and measured within the framework described by Maggs & Speed (1967) with some adjustments for my own requirements. Measurements on highly fragmented shell, for example, *Perna perna* followed Hall (1980). One of the points of the coastal study was to investigate the shellfish collecting strategies employed by the different groups in the different ecological habitats and whether distance from the resource area played an active role in the species collected. In order to investigate these aspects, wet shellfish mass (shell and meat), size and meat mass were chosen as criteria rather than measures such as energy (Joule). The reason for this choice was, as the ethnographic studies clearly indicate (Bigalke 1973; Meehan 1982), people do not collect and transport energy. There are specific reasons for collecting specific species, such as taste, ease of collecting, size and abundance. People collected and transported shell and meat mass as wet shellfish, which may be an important consideration when it had to be transported over long distances. To establish meat mass for the different species and the total collecting weight, the shell of modern day species was measured, shell with the meat weighed and then only the meat. From this exercise it was possible to establish which shellfish species were the most 'economical' to collect in terms of shell mass *versus* meat mass. In other words, what percentage of the total collected mass of a species is edible (Table 1). I refer to this percentage as the economic return ratio (ERR).

It is clear from Table 1 that the largest shellfish species or the most abundant or easy to collect are not always the most economical species. Although species such as *Patella tabularis* are large and contain a relatively high meat mass per individual, they contain a relatively low percentage of edible meat (21%) in comparison to the total collecting weight. The reason being that the species has a thick, heavy shell. In contrast, *Donax serra*, while being half the size of *Patella tabularis*, also contains half the meat mass but double the percentage of edible meat mass per total weight (42%). Ethnographic observations (Bigalke 1973; Meehan 1982) indicate that people tend to collect the largest available species. Where distance was not a factor total collecting weight may not have played a role. However, weight may have been an important consideration when shellfish had to be transported over large distances. These aspects will be discussed when the shellfish from different sites are analysed.

Table 1 indicates that the most economical shellfish species in terms of the ERR proved to be *Solen capensis* (64%) followed by *Haliotis spadicea* (59%), *Haliotis midae* (55%), *Donax serra* (42%), *Perna perna* (35%), *Patella argenvillei* (26%), *Patella miniata* (25%), *Patella oculus* (24%), *Patella barbara* (21%), *Patella tabularis* (21%), *Turbo sarmaticus* (20%), *Patella longicosta* (20%), *Patella cochlear* (19%) and *Oxystele* spp. (17%). No attempt has been made to estimate the composition of other food

Fig. 17. Stone feature and midden capping a dune at De Hoek.

**Fig. 18. Excavation of the circular stone 'floor/platform' in Figure 17. Note the large number of fire cracked stones and charcoal.**

resources to the diet (*cf.* Buchanan 1988) because this seems to be a dubious procedure (Wilson 1990).

A problem encountered early in the study was how to distinguish between true pastoralist and non- pastoralist sites dating within the past *ca* 2000 years BP. In order to distinguish between the different shell middens the following system was used.

Pastoralist occupation refers to open-air shell middens which contained small numbers of stone flakes and a

Fig. 19. Stone feature/fire place in the Goedgeloof dunes.

'convincing' number of individual domesticated animals (with or without ceramic remains).

Non-pastoralist sites, also referred to as 'ceramic' occupation in the study, refer in general to groups which seem not to have possessed stock, but possessed pots (with or without small numbers of stone tools).These groups may have been;

pastoralists dispossessed of their stock,

pastoralists living at the coast but keeping their stock somewhere else,

hunter-collector-fishers (HCF) who lived at the coast and possessed pots or acquired the skills and knowledge to make pots (see below),

or hunter-collector-fishers and pastoralists living together as a group, with or without stock (see below).

In addition to 'convincing' numbers of domesticated animals, shellfish species found in the sites were also used to establish origins. This distribution may not be a true reflection of reality, but it did help to categorise the middens.

## FEATURES

During the study several classes of features could be identified.

### Large stone features

Circular and irregular stone features were abundant along the coast and adjacent dune fields. Goodwin (1946:4) describes several features from near the Slang River Mouth (Oyster Bay), which he refers to as "fire places" for cooking food. Similar stone features were also reported from Pearly Beach along the south-western Cape coast (Avery 1974). These stone features comprised of fire cracked stones and were usually associated with large

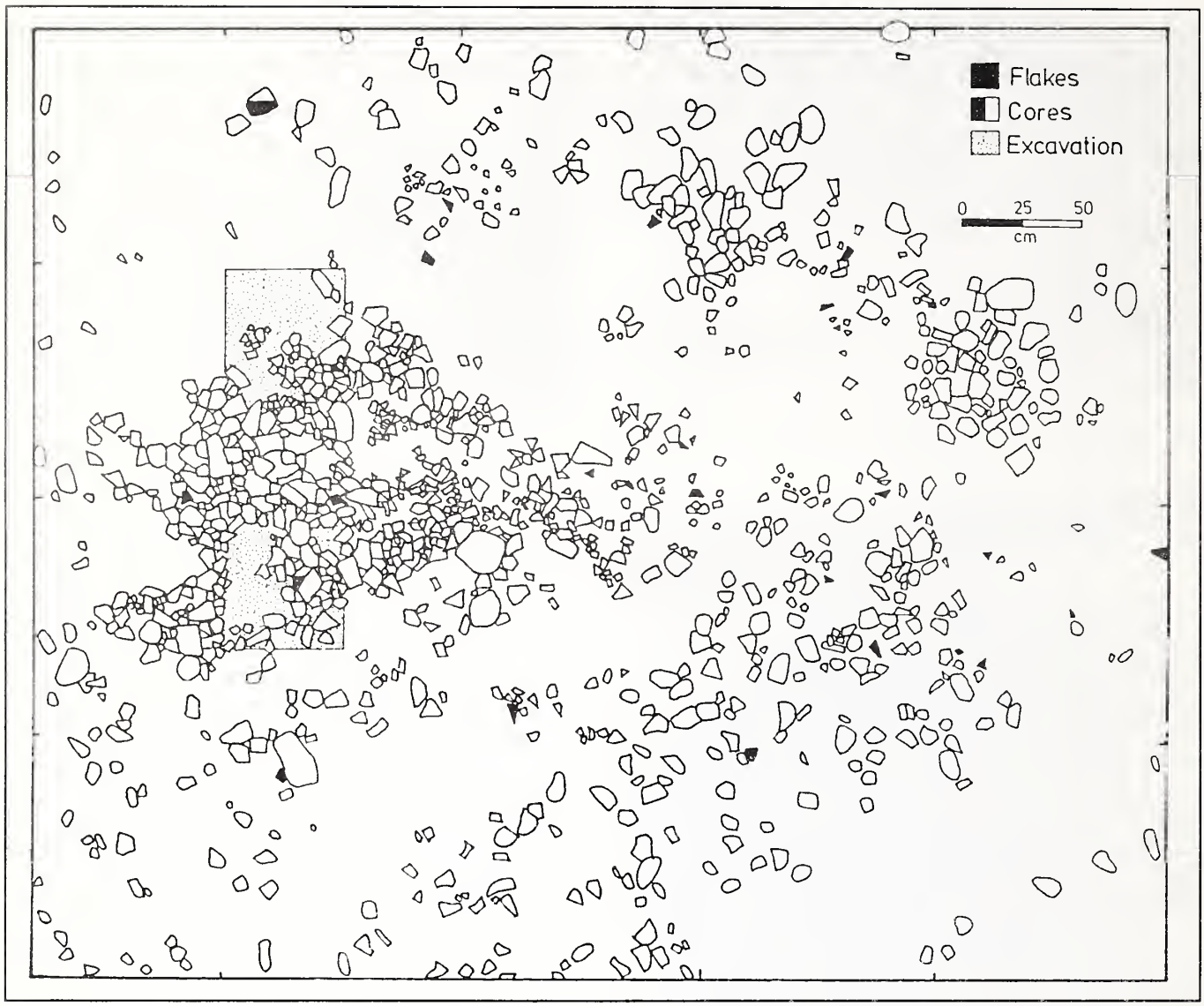


**Fig. 20. A cluster of stone features at St Francis Bay.**

amounts of charcoal and small quantities of shellfish and fish remains (see also Cairns 1975) (Fig. 17). One of these features was excavated and dated to 290 ± 50 BP (Pta-3908) (Fig. 18). Although some of these features contained pottery, they were also associated with other cultural identities *i.e* Kabeljous Industry (see below).

They were found in large clusters or as single features (Figs. 19 & 20) and may represent cooking platforms for shellfish. It may be speculated that the shellfish were cooked or smoked on top of the hot stones to prevent the meat from gathering sand.

Several tidal fish traps were also observed along the coast. The largest complex was situated between Oyster Bay and Thyspunt (Goodwin 1946) (Fig. 21), and is similar to those discussed by Avery (1975) along the Gansbaai/ Cape Agulhas coast in the south-western Cape.

**Shell middens with pottery and domesticated fauna and those with pottery only.**

Both types of sites usually yielded few stone tools and apart from pottery, contained little other cultural material. The pastoralist middens contained, or were dominated by shellfish species that yielded relatively high meat mass per individual species, for example, *Solen capensis*, *Perna Perna* and *Donax Serra*. 'Ceramic' middens on the other hand, contained high frequencies, or were dominated by shellfish species from the upper balanoid zone, notably *Oxystele* spp. and *P. perna*. Species from the lower balanoid zone were as a rule not well represented. The oldest radiocarbon date for pottery in the south-eastern Cape was 1770 ± 50 BP (Pta-9311), and the oldest date directly associated with sheep and cattle remains was 1560 ± 40 BP (Pta-5982).

**Shell middens, without pottery, associated with a quartzite stone industry**

For convenience in future discussions this quartzite industry is referred to as the Kabeljous and is probably what Rudner refered to as "A Late Mossel Bay industry (?) with giant cresents" (Rudner 1968:536).This industry contains

**Fig. 21. Fish traps between Oyster Bay and Thyspunt.**

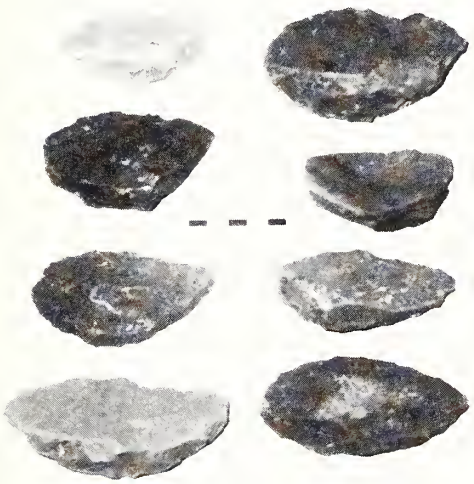

**Fig. 22. Large quartzite segments found on shell middens along the Cape St Francis coastal region.**

a number of quartzite cobble stone tools, for example, hammer stones, bored stones, grindstones, rubbers, cores, cobble adzes and scrapers, flakes and large segments (Fig. 22). Sites with this industry date from 4700 BP. The large segments seem to be restricted geographicaly. They have only been found along the coast from Klasies River Mouth in the west to the Fish River Mouth in the east, but they may extend further east. They date between approximately 3000 and 1800 years BP. In general, these sites were also dominated by *P. perna* (it is the most abundant shellfish species in the research area) and *Patella* spp. Species of the lower balanoid zone were usually also well represented. The people responsible for this industry are referred to as hunter-collector-fishers (HCF) or Kabeljous groups. These were mobile groups who lived permanently on the coastal foreland.

**Shell middens, without pottery, associated with a silcrete or quartz microlithic Wilton Industry.**

The people responsible for this Wilton Industry are referred to as hunter-gatherers (HG) or Wilton groups. These were mobile groups presumably from the adjacent

**Fig. 23. An example of damaged shell middens in a residential area at Kabeljous River Mouth. Sampled 1982.**

Cape Fold Belt mountains (CFB) who visited the coast occasionally. Wilton deposits in caves and open-air shell middens contained high frequencies of quartz or silcrete microlithic stone tools similar to those found in the adjacent mountains. Segments, however, were absent from the open-air middens that also contained silcrete. The open-air silcrete sites date between 5180 BP and 1900 BP. The shellfish species in these sites are similar to those represented at sites of the Kabeljous Industry.

## DISCUSSION

This paper introduces and describes the archeological landscape of the Cape St Francis coast and adjacent shifting dune field during the early 1980s. Furthermore, it illustrates how this landscape has changed since then and the effects this had on the archaeology of the area. The initial rescue exercise (for example Fig. 23), and the research which followed, has been a relatively successful venture in terms of data collection. Unfortunately, today there are no archaeological sites left between the Kromme River and the small nature reserve at Cape St Francis Point (Fig. 15). The same is true for the Seal Point area (St Francis Bay Resort) and Tony's Bay is under threat from the possible construction of a nuclear power accelerator. The Thysbaai and Goedgeloof dune areas are slowly being suffocated by invading alien vegetation.

The second part of the paper outlines the research approach followed during the study; how the different archaeological features were categorised, what groups of people were associated with these features and the study areas. A focus of the study was to investigate the shellfish collecting strategies of the different groups (outlined above), living in the open and in caves and rock shelters. Another was to investigate the distribution and age of the quartzite industry labelled in this paper as the Kabeljous Industry. The results of this study and other information from the study will be presented elsewhere (Binneman in prep.).

## ACKNOWLEDGMENTS

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# READING BETWEEN THE LINES: MONUMENTS AS METAPHORS

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## ABSTRACT

Large artifacts such as buildings, statues and open spaces are patterned through time in particular political, social and economic circumstances. The dialectics of power, domination and resistance that characterised the period in which the artifacts were fashioned can be understood by reading the artifacts as silent texts. If we decipher the grammar, metaphors and the symbolism that is embedded in the large artifacts then we can understand their meaning. By developing tools that can enable us to understand the spatial setting, time and social contexts of monuments, it becomes possible to unravel the puzzle of their extralinguistic character. This paper discusses some of the issues that appear to be communicated through the symbolism of three statues from the University of Cape Town (U.C.T.).

Archaeology concerns itself with the study of artifacts. Historical archaeology, in particular, studies the artifacts about which some written texts exist. One way of getting to the hidden meaning of artifacts is by reading them as silent texts. Such an approach gives the archaeologists an unfair advantage over other disciplines that do not make use of archaeological approaches. Archaeologists try to understand the meaning of objects by placing them into a context. One way of achieving the objective of understanding the meaning of artifacts is by viewing material culture as a set of systems of communication.

Using by Martin Hall's (1993) definition of historical archaeology as "the archaeology of colonialism" it is possible to understand the dialectics of power, domination and resistance. Cape Town being an early site of contact between Europe and Southern Africa offers a variety of material culture that can be studied to answer some questions about domination and resistance. The dominant ideologies of the nineteenth to the twentieth century Cape Town can be understood by studying the symbolic meaning of the City's monuments. This paper discusses some of the interesting issues that are communicated through three statues that represent the three different stages of the development of the University of Cape Town namely, the Cecil John Rhodes statue, "From the Hoerikwagga" figure and the "Alma Mater" sculpture.

The statue of Cecil Rhodes was sculpted by Marion Walgate. It was commissioned in 1934 by the then Governor General, Earl of Clarendon. The statue sits above the rugby fields in the upper campus of the University. It is fixed onto a granite wall (Fig. 1). There is an inscription in both Afrikaans and English that reads:

I DREAM A DREAM/ BY ROCK AND HEATH AND PINE/ OF EMPIRE NORTHWARDS/ AY ONE LAND/ FROM THE LION'S HEAD TO THE LINE

These words by Rudyard Kippling aptly describe Rhodes' ambitions that will be described in this paper. The statue portrays Rhodes sitting a pondering posture with the chin in the right palm while the elbow rests on his thigh. This posture has prompted comments such as "...his spirit is still brooding over the Cape Flats" by the Cape Argus (November 21/1962) for instance.

The statue is strategically placed facing northwards. It stands on the granite steps that lead to the academic departments and lecture theatres. Less than a metre behind it runs a road that offers vehicular entrance to the upper campus. A survey of photographs dating to pre-1962 reveals that this is not the statue's original position. It used to stand below the rugby field where the current subway is. It was moved during the construction of the subway. During the pre-1962 period an iron fence to the south and wooden fence to the north enclosed the statue. The iron fence resembles what has been suggested to be a typical feature of the Rhodesian house veranda in Zimbabwe by Jackson (1989). Besides the upper campus buildings in the background, part of Table Mountain concludes the spatial setting for the statue. All these features contribute to the statue's expression of Rhodes' inspiration, dreams and aspirations.

It is worthwhile to place the statue into the broader context of the University's conception. One of the pivotal features in architecture and planning is the development of an axis. This has become a very important exercise in field

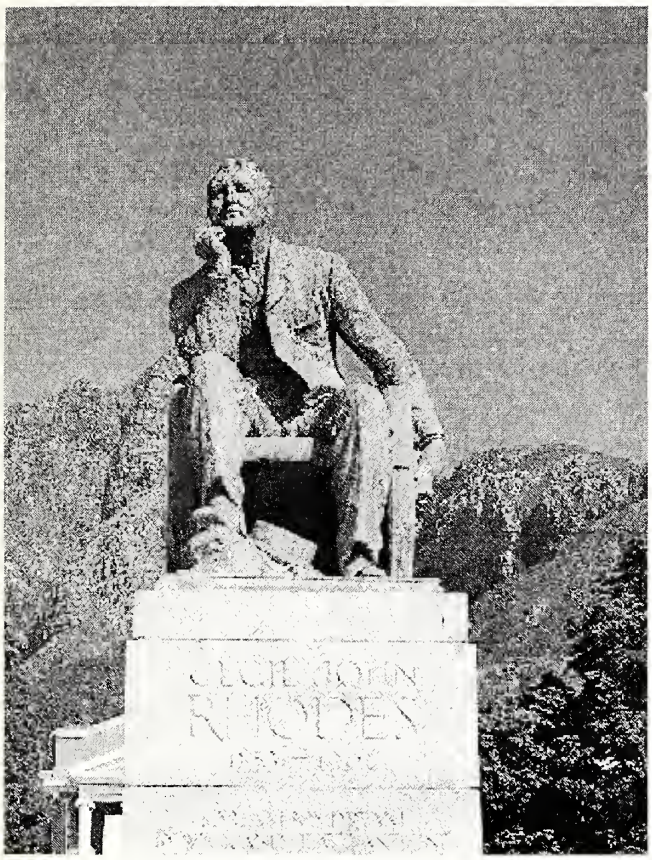

**Fig. 1. The Cecil John Rhodes statue on the upper campus of the University of Cape Town. Photograph: David Worth.**

archaeology as well. One has to develop a datum point from which the site and its features can be referred. In the case of the Groote Schuur campus, Solomon, the University's original architect (Phillips 1993) developed the axis. The architect drew an axis that ran up the Japonica walk through the Summerhouse to the Devil's peak (Phillips 1993). This shows that from 1901, (when the initial sketches were presented), the Japonica walk, Summerhouse and Devil's peak formed an integral part of the axis from which Solomon's integrative architectural vision would be developed. It is this notion of one whole that makes the post-1962 position of the Rhodes statue very interesting. When the statue was removed from its original position to the new location it was aligned on the axis. The pre-1962 photographs reveal that it was not in the axis. Placing it on the axis, therefore, suggests some interesting interpretations.

Firstly, it can be interpreted as a deliberate act of acknowledging the centrality and importance of Rhodes the human being to the University of Cape Town. The statue emphasises the role that Rhodes played in the establishment of the Institution and furthermore acknowledges the fact that the original college was constructed on part of his Groote Schuur estate. In its original position the statue was 'fortified' as described above by an iron and wood fence. In the second aligned location the fence motif is dropped. This allows for a second interpretation. Making the statue more accessible by not caging it suggests conformity. The present site of the Groote Schuur campus was a cause for contention. Some citizens resisted the building of the University in Rondebosch because it would hinder their access to the beautiful gardens of the Groote Schuur estate (Phillips 1993). The discontention was, however, resolved by a promise that the area will remain accessible to the general public. Doing away with the enclosure motif is testimony that the promise was still honoured even four decades later. This indicates to some degree the continuity of Solomon's original plan, which emphasised accessibility. One other aspect of Solomon's plan that is conformed to is symmetry. If one draws a line through the Japonica walk to the Devil's peak one recognises that the line will symmetrically divide Rhodes Statue as it does to the Jameson Hall that is behind the statue. Some symbolism can be read from the new location of the statue. As pointed out above, a datum line is of great importance to the field archaeologist because that is where the survey and grid layout of the site is conceived. Placing the statue at the 'heart' of the spatial setting of the University is an unconscious act of immortalising Rhodes. The size of the statue emphasises this reminder. It is one and a half times life size. It broods over the campus 'like a colossus' and petty people pass by it to find themselves honourable an education, decades after the death of Cecil John Rhodes.

The fence that used to enclose the statue created a sacred atmosphere. As people opened the gates on their way to and from the upper campus, they engaged in a process of paying tribute to the individual on whose land their University is built. That the statue remains 'unprotected' can be interpreted as expressing a new value. The piece of art can be consumed by all and is thus open to different interpretations.

Table Mountain and the Cape overawed Cecil Rhodes. He regarded the Cape peninsula as his home. That he saw Cape Town as the most suitable place for educating the young people, who would uphold his aims of creation a Union of South Africa is hinted in his speech to the Congress of the Afrikander Bond in1891. Rhodes campaigned at this congress for the establishment of a university that would educate young people from all over South Africa, and even Mashonaland, (present day Zimbabwe). The spatial setting of the statue, with Table Mountain stretching behind it can be read as symbolising Rhodes' dreams. The breadth of the mountain inspired Rhodes' aim of broadening his empire. Historical facts prove that Rhodes nearly achieved his aim by subjugating the indigenous people, especially those of the present-day Zimbabwe and Zambia. These two countries were at one time Rhodes' land known as Southern and Northern Rhodesia. A replica of the statue sat in the Cecil Square (now Africa Unity Square) in the then Salisbury (Harare) until Zimbabwe attained independence. The breadth of Rhodes' dreams and his aim of creating a Cape to Cairo Empire were symbolised by the north orientation of the statue. This aim is further emphasised by the creation of the Federation of Rhodesia and Nyasaland, which then

included the present day Malawi.

The interesting question is whether the statue is still meaningful more than sixty years after the Rhodes memorial committee presented it to the University? The bronze statue was sculptured to survive through time by assuming new meanings. Linking the past to the present can create the meanings. The idea of a university as a place of unionisation is still relevant but in a new paradigm. Students from the world over converge to share ideas and cultures. What has changed is the notion of a union. Instead of it being a Union of South Africa and the lands that Rhodes won for 'South Africa', the idea of a union can now be understood as an act of creating a 'rainbow' facade of the institution. The brooding spirit that is apparent on the face of the statue can no longer be seen as a contemplation of colonising lands and consolidating personal fortunes. It express the loss experienced with the changing times. The statue does not express the attitude of the university. Rather, it has been used in the past to express the differing attitudes towards colonialism. At one time some students painted the statue pink as a way of demonstrating their resentment of the 150th celebrations at the university (Cape Argus 14/09/79). In 1996 an advertising agent dressed the statue in jeans and included a placard reading "ANYONE CAN LOOK COOL IN JEANS". Thus the statue is seen as communicating a different message. It can therefore be safely concluded that the Rhodes statue is full of symbolism and its spatial setting is strategic.

The idea of unity is expressed, differently though, by the "From the Hoerikwagga" statue (simply referred to as Horeikwagga in this paper). It was sculptured in metal by Gavin Younge and presented to the University in1984. The statue stands between the Jameson Memorial Hall and the students union with the Jagger Library as its backdrop. It is a figurine with human features. Its torso is broad and has a small head.

The statue is aimed at appealing to people to ponder for some inspiration. It represents the period before the establishment of the University. The statue pays tribute to the people about whom history is silent. This is suggested by its title, which is claimed to be the indigenous Khoi name for the Table Mountain (Monday Paper 3:36). The statue can be viewed as an effort of preserving what has been lost through the process of education. People refer to Table Mountain by its English name, and it ultimately appears as if an indigenous name for it never existed. This has happened with many aspects of indigenous cultures in Africa. They have been forgotten due to colonial 'civilisation'.

There is a power play suggested by the location of the statue. As described above, the statue is dwarfed by some buildings that are symbols of interaction between European forms of architecture and vernacular landscape. This further emphasises the question of unity discussed above. The location of the statue expresses harmony. If the Hoerikwagga is seen a representing the totality of the indigenous way of life, then the fact that its location suggests no conflict between European education (as represented by the Library), religions that are foreign to the pre-colonial Cape (represented by the Jewish society housed in the student's union) describing the *modus operandi* of the University. It is therefore safe to assert that the Hoerikwagga celebrates a legacy of prehistoric existence and that such an existence plays a crucial role in our understanding and embracing of new ideas and challenges of the modern world.

One other monument that communicates a different message is the Alma Mater that is at the education building. It heralds a new era. The monument is a caryatid, a figure that is used in architecture, a column for supporting structures. It stands holding some geometric emblems in its hands. On its head rests a chameleon while another one is half way climbing up the mast. This statue although named the "Alma Mater or Bounteous Mother" (Monday Paper 15(32): 1), has no plaque or inscription that would suggest that it represents particular interests. It stands in front of the education building facing west. The sculptor, Bruce Arnott, was commissioned by the University's Works of Art committee. The Works of Art Committee suggests the idea of a sculpture that celebrates the naturing tradition of the university. Normally, the committee goes only as far as suggesting the parameters and funding the works but does not stipulate what they should be. This procedure was followed for the Hoerikwagga statue. The committee commissions an artist in terms of guidelines dating to the early 1980s, which stipulate that one percent of the total cost of every new building, or extensive refurbishment should be set aside for art. In cases where the piece of art is presented to the University, such as the Rhodes statue, the committee will consider whether or not the reasons for presentation ties in with the University ethos.

The Alma Mater statue is symbolic in that its is the only female monument in the University. When it is read in its time context, the monument expresses a sense of transformation. Being female, the statue acts as a metaphor of a challenge to the existing male dominant facade of the university society. It may not have been a mere coincidence that the monument was unveiled only a week after the installation of the first black female Vice Chancellor of the University. It may be argued, therefore, that this particular monument heralds a new era.

The chameleon on its head suggests that change, although at times necessary, should be approached at a slow and cautious pace. That the chameleon has already reached the top may be taken to symbolise the members of the academic fraternity who have achieved academic distinction. Such academics are viewed by their students as role models. Thus by facing downwards the chameleon suggests an act of beckoning and encouraging those who wish to attain academic excellence. It emphasises that the route to academic excellence is slow and tedious but achievable at the same time. It may be safely argued that the chameleon is a symbol of willingness to change with the times. Given the general political climate of South Africa, the chameleons on the statue appear to be communicating the university's readiness to accept the challenges of the "rainbow nation".

This monument is a silent expression of unity. That there is no plaque defining it suggests that any member of the University community can associate themselves with it. In other words it is through big silent artefacts such as this one that the notion of racial unity can be embraced and expressed.

The location of the monument is very interesting as it raises many suggestions. It stands in front of the education building, which is the central area of the whole Groote Schuur campus. The strategic location and its symbolism suggest unity. The unison agenda is expressed in both the cultural and social landscape in which it was placed. As has been argued above, the monument embraces the multiraciality of the University of Cape Town, and therefore, by locating it at the centre of the campus stresses that for transformation to succeed it has to be sought and expressed in all spheres of the institution. That it is oriented to the summerhouse appears to be emphasising the importance that the past plays is determining the future.

The height of the statue coupled with its location raises the question of prerogative elevation. The sculpture has an imposing height of 2,5 metres. This suggests the hierarchical order of the university society. It has a height hat is analogous to the highest court in Biblical Athens - the Areopagus. Does this mean that the woman in the university has suddenly been elevated to royal dignity and social pre-eminence? If this is the case then the statue is a symbol of authority. As suggested already the sculpture is seen as a metaphor which challenges the patriarchal attitudes of society in general. In this case, then the statue heralds an era of elimination by substitution.

Worth commenting on is the style category in which the sculpture falls. In figural art, the size, shape and style of a piece operate to express an intended message (Cole1989). The message can be intended or implied, that is, we have both the displayed and the metaphoric messages. That the monument is made in a naturalistic style, that is, it is complex and volumetric (Cole 1989) is a statement that expresses the complexity of the notion of transformation.

An attempt at interpreting monuments should take into account the social interpretation of some features in real life. The elongated neck shows the dignity of a woman. Thus in this context the statue can be viewed as an attempt at remodelling the way women are perceived in the society. The well-plaited hair symbolises the presentibility and dignity of a woman. Dignity, presentibility and responsibility are all qualities of a communal leader. The statue challenges the traditional male leadership trend and unequivocally asserts that women have leadership qualities as well.

The intended meaning of the figure becomes more clear when the values attached to it by its patrons are considered. The media plays a vital role in reinforcing these official values. In the case of the "Bounteous Mother" the Monday Paper Volume 15(32), has been responsible for explaining how the bronze sculpture should be understood. It is seen as a symbol of the 'normalisation' of the education system in South Africa and celebrates its (education) future. The aspects of the 'normalisation' have been discussed above. It is worth emphasising, though, that the process of normalisation goes deeper than assuring equal opportunities to males and females or between the historically disadvantaged and the advantaged. A complete transformation involves a complete overhaul of the education system from primary to tertiary. The monument 'declares', furtively, that such a transformation should be ignited at the "academic blast furnaces"- universities.

Icons are made in certain political climates and are usually commissioned to support the value systems of a given political era. Most figures at University of Cape Town represent people who have contributed to the institution's birth and development. The Alma Mater, however, does not have facial features that resemble any known person. It is very easy to identify Rhodes, Baxter or Jagger for example. The lack of idiosyncratic features marks the difference between art and real life. It is a common aspect of African art (Cole 1989). The Alma Mater is not a portrait image. These silent qualities of the statue are vital for the production of an infinite variety of meanings that can be attached to the statue. The inner realities of life become alive through the visual conventions of this sculpture.

It may be safe, therefore, to argue that the university, being in a politically changing society needs to consider transforming policies that pertain to all its departments. These are challenges that the university is currently grappling with. This change cannot come overnight lest it be superficial and hence less durable. In this light the monument can be viewed as an expression of unity and transformation.

There are many causes of change of meaning of artefacts through time. The three artefacts discussed here illustrate two major causes: Translocation and Appropriation. It is appreciated that translocation is a form of appropriation but due to the effect it has on the change of meaning it is elevated to the same status with appropriation in this paper. The term appropriation is used, here, to refer to the process of adopting an icon and finding new use for it in such a way that in the final analysis the artifact acquires a new meaning. The Hoerikwagga, for example, was appropriated by the University of Cape Town press as its logo. The act gave the artifact not only a new meaning but new value as well. It is an example of a mentality whereby appropriating an icon that is seen as representing that which is African is perceived as being politically correct. The same happen to the Lydenburg Heads that Hall (1996) discusses in "Transgressing Boundaries". Some form of appropriation of the Hoerikwagga was interpreted as criminal in 1984. Some students daubed the sculpture and a reward of R500 was set aside by the university administration for information that would lead to the prosecution of the culprits. The issue was open to debate on how people should react to art. It is interesting to note that appropriating monuments to send messages or responses has been the most common form of appropriation at University of Cape Town. The war memorial that stands directly behind the

Rhodes statue was painted with Chris Hani's dates of birth and death after his assassination in 1993. The war memorial is supposed to commemorate the two World Wars. Besides being painted pink in 1974 and dressed in jeans in 1996, the Rhodes statue was twice smeared with grease and had a German swastika outlined in pink in 1997. Some words were written in a coded language below it. The "Bounteous Mother" may escape such responses because it is fixed onto a column that is six metres high. Whether such responses are misappropriations or not is a question of ethics but one thing is unmistakably clear, that is, appropriation is an identity statement.

Can artifacts be viewed as silent forms of communication, that is, as a combination of signs and symbols that create meaning? In response to Martin Hall's paper on the Lydenburg Heads, Patricia Davison (1996) argues that the terms "signs" and "symbols" cannot allow themselves to be unclear because they would not communicate the intended message. This is true if signs are defined as symbols or marks that represent some form of communication that convey information such as instructions. But that will be giving the term a fixed function. In the context of material culture, however, signs are not necessarily fixed in function but rather generate various meanings through time and space. They are perceived as suggestive rather than authentic markers. When their spatial, social and time context is understood, forms of material culture generate a variety of meanings that in most cases are infinite. Interpretation of material culture, thus, elevates signs to the state of being extralinguistic. This state enables signs to operate independently of the fixedness that Davison's argument appears to suggest. Such flexibility allows for interpretations as discussed above.

The paper is an argument that archaeology is equipped to decode meanings by placing the artifact in its physical, social and time context. This paper has attempted to show that monuments celebrate a particular phenomenon that is relative to time and space. The general idea that seems to run through the three statues discussed in this paper is that the formative years of many forms of life play a critical role in shaping its future. The paper has argued that artifacts of history can be investigated just as those of prehistory to extract the silent information about the world in which they were manufactured.

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